

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

New England Power Generators
Association, Inc.

v.

ISO New England Inc.

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Docket No. EL18-154-000

**PROTEST OF THE
NEW ENGLAND STATES COMMITTEE ON ELECTRICITY**

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Pursuant to Rule 211 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (“Commission” or “FERC”), 18 C.F.R. § 385.211, and the Commission’s May 24, 2018 Notice of Complaint, the New England States Committee on Electricity (“NESCOE”)¹ files this Protest in response to the complaint that the New England Power Generators Association, Inc. (“NEPGA”) filed against ISO-NE on May 23, 2018 (the “Complaint”).² This Protest is supported by the Affidavit of James F. Wilson, appended as Attachment A (“Wilson Affidavit”). New Hampshire does not support this filing.

¹ On May 24, 2018, NESCOE filed a doc-less motion to intervene in this proceeding. NESCOE is the Regional State Committee for New England. It is governed by a board of managers appointed by the Governors of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont and is funded through a regional tariff that ISO New England Inc. (“ISO-NE”) administers. NESCOE’s mission is to represent the interests of the citizens of the New England region by advancing policies that will provide electricity at the lowest possible price over the long term, consistent with maintaining reliable service and environmental quality.

² Complaint and Request for Expedited Consideration of the New England Power Generators Association, Docket No. EL18-54-000 (filed May 23, 2018). As support, the Complaint attaches the Affidavit of Paul M. Sotkiewicz, Ph.D, as Exhibit 1 (“Sotkiewicz Affidavit”). Capitalized terms not defined in this filing are intended to have the meaning given to such terms in the ISO-NE Transmission, Markets and Services Tariff (the “Tariff”).

I. INTRODUCTION

The Commission should reject the Complaint. As a threshold matter, the Complaint fails to meet the basic requirements of Rule 206 of the Commission’s Rules of Practice and Procedure. 18 C.F.R. § 385.206. NEPGA does not clearly identify the market rule it is challenging. Accordingly, the Commission should dismiss the Complaint without prejudice.

Even assuming that the Complaint meets the basic requirements of Rule 206, NEPGA does not carry its burden under section 206 of the Federal Power Act (“FPA”), 16 U.S.C. § 824e. First, its claims are speculative. Second, NEPGA’s argument rests on a flawed premise that is divorced from Commission precedent and the design of the Forward Capacity Market (“FCM”). The Complaint alleges that it is unlawful for ISO-NE to allow resources retained for fuel security to be “price takers” in the Forward Capacity Auction (“FCA”), where they are effectively bid into the auction at zero dollars. NEPGA lists a speculative “parade of horrors” resulting from this rate treatment, centered around the assertion that the treatment produces “price suppression” (the Complaint refers to alleged price suppression over 120 times in its 39 pages).³ It does not.

Contrary to artificially lowering capacity market prices, the treatment of resources retained for fuel security as price takers is an economic, competitive outcome and entirely consistent with Commission precedent. In a series of recent cases concerning the New York Independent System Operator (“NYISO”), the Commission explained why similar claims of price suppression were unfounded. The Commission should, consistent with these prior orders, find that NEPGA has failed to establish that the existing rule is unjust and unreasonable. Once the foundation of NEPGA’s argument is stripped away, its scary list of hypothetical market outcomes is exposed as pure fiction.

³ Complaint at 10; *see id.* at 4-5.

Moreover, the commission should not be lured into a false perception that lower prices in recent competitive forward capacity auctions are a result of buyer market power or blanket claims of price suppression. While those prices may not be at a level NEPGA members would prefer, they are the competitive auction outcomes. The auctions, unlike what NEPGA asserts, have achieved the objective of attracting investment, as evidenced by the participation of new resources and clearing of excess capacity in the recent auctions.⁴ NEPGA's argument is nothing more than a replay of complaints and protests from generators, which the Commission has rejected, that suggest they are entitled to a particular market price.⁵

In addition, the analysis that NEPGA relies upon to support its claim is fundamentally flawed. The Wilson Affidavit explains how the analysis is skewed and why the Commission cannot rely on it to grant NEPGA's requested relief. The Commission should not give weight to NEPGA's claims regarding price impacts and market consequences.

If the Commission does not reject the Complaint, it should decline to adopt NEPGA's proposed remedy. NEPGA's suggested mechanism would likely force consumers to pay twice

⁴ See ISO New England Inc., Results of the Annual Forward Capacity Auctions, at <https://www.iso-ne.com/about/key-stats/markets#fcareresults>. ISO-NE's press release in connection with its most recent auction stated that it closed with 1,103 megawatts ("MW") of excess capacity across the system. ISO New England Inc., *New England's Forward Capacity Auction Closes With Adequate Power System Resources for 2021-2022*, Feb. 8, 2018, available at https://www.iso-ne.com/static-assets/documents/2018/02/20180208_pr_fca12_initial_results_release.pdf.

⁵ See, e.g., *ISO New England Inc. and New England Power Pool*, 125 FERC ¶ 61,102 at P 43 (2008) ("The purpose of the New England FCM is to attract and retain sufficient capacity to maintain ISO-NE's Installed Capacity Requirement, and to do so, FCM prices will need to average out over time to the cost of new entry. But while the average price over time can be expected to match the cost of new entry, the prices in individual years will vary with market conditions above and below that average level. In that light, we do not agree that a resource should be guaranteed recovery of its full cost-of-service in each year, when the resource has the opportunity to earn more in some years."). More recently, the Commission has been explicit that "no individual supplier has an entitlement to a specific capacity price" and that "[t]he Commission's aim when using competitive markets as a regulatory mechanism is to protect competition to ensure just and reasonable rates, not to protect individual competitors." *ISO New England Inc.*, 158 FERC ¶ 61,138 at P 58 (2017), *appeal pending*, *NextEra Energy Resources, LLC et al. v. FERC*, No. 17-1110 (filed April 3, 2017) (collectively, the "RTR Exemption Cases").

for capacity resources. The Wilson Affidavit explains that when resources retained for fuel security do not clear the primary FCA, ISO-NE will procure redundant capacity as a replacement.⁶ NEPGA’s “solution” is to enter the fuel security resources into the Annual Reconfiguration Auctions (“ARAs”) as supply.⁷ However, as the Wilson Affidavit points out, this does not cure the duplicative procurement in the FCA.⁸ Given the features of the ARA, this additional supply would likely drive down prices significantly in that secondary auction, thereby marginalizing or reducing to zero any credit consumers would receive from the retained resource’s capacity revenues.⁹ Consequently, consumers would bear the full cost under the cost-of-service agreement without any capacity revenue offset, effectively a double payment for capacity. The Wilson Affidavit also explains how NEPGA’s proposed solution could intensify the region’s fuel security challenges.¹⁰

Finally, the Commission should deny NEPGA’s request for fast-track processing. NEPGA has not demonstrated that it needs an accelerated process to resolve its Complaint. On the other hand, the issues implicated in the Complaint could have wide-ranging and substantial consumer and market consequences. In light of the magnitude of NEPGA’s requested relief, the Commission should reject NEPGA’s request to rush through significant market rule changes.

⁶ Wilson Aff. at ¶¶ 11, 32.

⁷ Complaint at 5-6; 19-25.

⁸ Wilson Aff. at ¶¶ 11, 32, 34. *See also id.* at ¶ 14.

⁹ *Id.* at ¶ 34.

¹⁰ *Id.* at ¶ 32.

II. BACKGROUND

A. Context for the Complaint

On May 1, 2018, ISO-NE filed a request with the Commission to waive provisions of the Tariff to retain two gas-fired electric generation facilities that it determined were needed for system reliability (the “ISO-NE Petition”).¹¹ Several events preceded ISO-NE’s request. Exelon Generating Company, LLC (“Exelon”), owner of the generation facilities at issue, the Mystic Generating Station (“Mystic”), had submitted Retirement De-List Bids to ISO-NE in connection with the FCA for the 2022-2023 Capacity Commitment Period (“FCA 13”).¹² ISO-NE subsequently determined that Mystic Units 8 and 9 (“Mystic 8 & 9”) were needed to address reliability risks related to fuel security over a two-year period beginning on June 1, 2022 and ending on May 31, 2024.¹³ These Capacity Commitment Periods correspond with FCA 13, which will be conducted in February 2019, and the fourteenth FCA (“FCA 14”), which will be conducted in February 2020. Mystic 8 & 9 have a combined summer generating capacity of approximately 1,400 MW and a combined winter generating capacity of just over 1,700 MW.¹⁴

According to the ISO-NE Petition, while the Tariff permits ISO-NE to retain resources seeking to retire to address local transmission security issues, the Tariff “does not contemplate retention to address reliability risks related to fuel security.”¹⁵ ISO-NE requested a waiver of the

¹¹ Petition of ISO New England Inc. for Waiver of Tariff Provisions, Docket No. ER18-1509-000 (filed May 1, 2018). This Protest refers to the proceeding relating to the ISO-NE Petition as the “Tariff Waiver Proceeding.”

¹² *Id.* at 1.

¹³ *Id.* at 3.

¹⁴ *Id.* at Testimony of Peter T. Brandien, Exhibit No. ISO-1, at 3.

¹⁵ ISO-NE Petition at 4.

Tariff to authorize the retention of Mystic 8 & 9 “to ensure the fuel security necessary for reliable operation of the New England electric grid.”¹⁶

The ISO-NE Petition addressed how Mystic 8 & 9, if retained for reliability, would be treated in FCA 13 and FCA 14. ISO-NE stated that the two units “will be entered into FCAs 13 and 14 as price takers” pursuant to the FCA’s current clearing rules.¹⁷ Specifically, Market Rule 1, Section III.12.2.5.2.5(g) of the Tariff (the “Clearing Rule”) provides that:

If a Permanent De-List Bid or a Retirement De-List Bid is rejected for reliability reasons, and the reliability need is not met through a reconfiguration auction or other means, that resource, or portion thereof, as applicable, is no longer eligible to participate as an Existing Capacity Resource in any reconfiguration auction, Forward Capacity Auction or Capacity Supply Obligation Bilateral for that and subsequent Capacity Commitment Periods. *If the resource, or portion thereof, continues to be needed for reliability reasons, it shall be counted as capacity in the Forward Capacity Auction and shall be compensated as described in Section III.13.2.5.2.5.1.* (emphasis added)

On May 16, 2018, Constellation Mystic Power, LLC (“Constellation”) filed with the Commission a cost-of-service agreement among Mystic, Exelon Generation Company, LLC (“ExGen”), and ISO-NE.¹⁸ Consistent with the time period set forth in the ISO-NE Petition, the proposed cost-of-service agreement would provide compensation for the continued operation of Mystic 8 & 9 in the Capacity Commitment Periods corresponding with FCAs 13 and 14.

¹⁶ *Id.* The ISO-NE Petition also seeks waiver of certain Tariff provisions in order to, among other things, exempt the Retirement De-List Bids for Mystic 8 & 9 from a local transmission reliability review requirement and extend until January 2019 the deadline for Exelon to decide whether to proceed with retirement or accept the terms of the reliability retention. *Id.* at 6, 20-29.

¹⁷ *Id.* at 26.

¹⁸ Constellation Mystic Power, LLC, Annual Fixed Revenue Requirement, Capital Expense Recovery, and Stipulated Variable Cost Recovery for Mystic 8 & 9 Fuel Security Service, Docket No. ER18-1639-000 (filed May 16, 2018) (“Exelon Filing”). Exelon is ExGen’s immediate parent company and Constellation’s ultimate parent company. This Protest refers to the proceeding relating to the Exelon Filing as the “Exelon Proceeding.”

Both the Tariff Waiver Proceeding and the Exelon Proceeding are in early stages and are pending before the Commission. In fact, as of this filing, ISO-NE had not even filed its answer in the Tariff Waiver Proceeding, and initial comments in the Exelon Proceeding are due today.

B. Brief Description of the Complaint

The Complaint appears to challenge the long-standing market rule governing the treatment of resources in the FCA that ISO-NE has retained for reliability.¹⁹ Citing to section 206 of the FPA, NEPGA alleges that ISO-NE's treatment of Mystic 8 & 9 as price takers in FCAs 13 and 14 "would render the ISO-NE tariff unjust and unreasonable and unduly discriminatory against every resource relying upon the capacity auction for a just and reasonable rate."²⁰ The Complaint extends not only to FCAs 13 and 14 but also to "subsequent capacity auctions."²¹

NEPGA contends that, if the Commission does not address this established rule, capacity prices will be "severely suppress[ed]," resources may retire prematurely or never seek to enter the market, fuel security concerns will be made worse, and the FCM will be eroded.²² NEPGA offers the Commission what it characterizes as a "market-based" and "easily implementable" approach to addressing its concerns.²³ The approach, which NEPGA is not "wedded to," would require resources needed for fuel security to offer into the FCM as its de-list price, subject to mitigation rules. If the resource does not obtain a Capacity Supply Obligation in the primary

¹⁹ As discussed in section III.A of this Protest, the Complaint does not refer to a specific Tariff provision, falling short of a threshold legal requirement for the Commission to act on the Complaint.

²⁰ Complaint at 3-4.

²¹ *Id.* at 1.

²² *Id.* at 4.

²³ *Id.* at 6.

auction, that resource could enter one-third of its capacity into each of the three ARAs.²⁴

NEPGA states that it filed a “conditional protest” in the Tariff Waiver Proceeding focused on the same issue in the Complaint and that its filed the Complaint “to ensure that the issue of just and reasonable capacity prices in FCA 13 is squarely queued up for the Commission.”²⁵

III. PROTEST

A. The Complaint Fails to Meet the Basic Requirements of Rule 206 and the Commission Should Dismiss It Without Prejudice

NEPGA fails to provide the requisite specificity in its Complaint for the Commission to act. Rule 206 of the Commission’s Rules of Practice and Procedure requires a complainant, *inter alia*, to “[c]learly identify the action or inaction which is alleged to violate applicable statutory standards or regulatory requirements” and “[e]xplain how the action or inaction violates applicable statutory standards or regulatory requirements.” 18 C.F.R. §§ 385.206(b)(1), 385.206(b)(2). The Commission has been clear that it will dismiss complaints that fail to meet these basic requirements.²⁶

Here, NEPGA never sets forth the specific rule it is challenging. The Complaint is aimed at the ISO-NE Petition and ISO-NE’s proposal in that proceeding to treat Mystic 8 & 9 as price

²⁴ *Id.* at 5-6, 19-25.

²⁵ *Id.*

²⁶ *Coalition of Eastside Neighborhoods for Sensible Energy et al. v. Puget Sound Energy et al.*, 153 FERC ¶ 61,076 at PP 59 (2015) (“*Puget Sound*”) (finding dismissal of complaint warranted where complainant “does not cite any specific provision of any Commission order or regulation, or any specific provision that [r]espondents allegedly violated.”); *Shell Energy North America (US), L.P. v. California Independent System Operator Corp.*, 141 FERC ¶ 61,083 at PP 40-41 (2012) (finding complaint deficient under Rule 206 because it had “not clearly identified the action or inaction which is alleged to violate applicable statutory standards or regulatory requirements, nor . . . explained how the action or inaction violates these standards and requirements.”); *CALifornians for Renewable Energy, Inc., (CARE) et al. v. National Grid et al.*, 137 FERC ¶ 61,113 at PP 2, 32 (2011) (dismissing complaint for failure “to articulate clearly and with specificity the action or inaction which is alleged to violate applicable statutory standards or regulatory requirements or to clearly state the relief that complainants want the Commission to provide.”).

takers in FCAs 13 and 14.²⁷ In discussing the treatment of Mystic 8 & 9 in these FCAs, the ISO-NE Petition referenced three different market rules to explain how the two units will be entered into the auction, including the Clearing Rule.²⁸ NEPGA does not specify, however, whether it is challenging any, some, or all of these rules. It simply references the ISO-NE Petition. This falls short of Rule 206. It is not enough for a complainant to make “broad reference” to the rule or regulation at issue: the specific provision must be clearly identified.²⁹ For almost 80 pages into its filing, NEPGA does not include a citation to a single market rule, and, even then, NEPGA only cites to the rules in the context of its proposed remedy in Exhibit 2 of the Complaint. NEPGA does not correct the Complaint’s infirmity when it describes how it has complied with the requirements of Rule 206.³⁰ There, NEPGA simply refers the Commission to other sections of the Complaint, which, as just discussed, omit any specific citation to the market rule or rules being challenged.³¹

NEPGA’s failure to set forth the specific provision or provisions it alleges are unjust and unreasonable is fatal to its claims. The Commission should dismiss the Complaint without prejudice consistent with its prior orders.

B. NEPGA Fails to Meet Its Burden Under Section 206 of Demonstrating that the Existing Rate is Unjust and Unreasonable

If the Commission reaches the merits of the Complaint, it should reject NEPGA’s claims for failure to meet its burden under section 206 of the FPA. The challenging party in an action brought under section 206 “carries the burden of proving a rate is unjust and unreasonable.”

²⁷ Complaint at 1, 3, 8-14.

²⁸ ISO-NE Petition at 26.

²⁹ *Puget Sound* at P 60.

³⁰ Complaint at 38.

³¹ *Id.*

New England Power Generators Ass’n, Inc. v. FERC, 879 F.3d 1192, 1200 (D.C. Cir. 2018) (“*NEPGA II*”); see *Emera Maine et al. v. FERC*, 854 F.3d. 9, 21 (D.C. Cir. 2017). If the Commission agrees that a rate is unjust and unreasonable, it must then set a new rate. *New England Power Generators Ass’n, Inc. v. FERC*, 881 F.3d 202, 205 (2018) (“*NEPGA III*”). Section 206 thus sets forth a two-step procedure: “[o]nly *after* having made the determination that the utility’s existing rate fails that test may FERC exercise its section 206 authority to impose a new rate.” *Emera Maine*, 854 F. 3d at 21 (emphasis in original). As discussed below, NEPGA has provided insufficient support for its claim and has not established, as it must under section 206, that the existing rate is unjust and unreasonable.

1. The Complaint Is Speculative

NEPGA implores the Commission to “provide relief now” and to direct ISO-NE to change its Tariff.³² But the Commission cannot take action “now” because the harm NEPGA claims is speculative.³³

First, Exelon has not yet made a decision regarding whether to retire Mystic 8 & 9 or participate in FCA 13. As the Complaint recognizes, Mystic 8 & 9 are seeking to retire from the ISO-NE markets.³⁴ Exelon submitted Retirement De-List Bids to ISO-NE, stating its intention to permanently retire the units and not participate in FCA 13.³⁵ ISO-NE has filed its Tariff waiver request with the Commission in order to retain these units for reliability given ISO-NE’s

³² *Id.* at 5.

³³ *NextEra Energy Resources, LLC et al. v. ISO New England Inc.*, 156 FERC ¶ 61,150 at PP 15-16 (2016) (“*NextEra*”); *Michigan Electric Transmission Company, LLC v. Midcontinent Independent System Operator, Inc.*, 156 FERC ¶ 61,025 at PP 15-16 (2016) (“*Michigan Electric*”); *CSOLAR IV South, LLC et al. v. California Independent System Operator Corp.*, 142 FERC ¶ 61,250 at P 47 (2013) (“*CSOLAR*”).

³⁴ Complaint at 3.

³⁵ ISO-NE Petition at 1.

determination that Mystic 8 & 9 are needed for fuel security.³⁶ However, even if ISO-NE seeks to retain a resource for reliability, the Tariff allows the resource owner to decline to be held and instead proceed to withdraw unconditionally from the market.³⁷ In fact, Exelon has stated that if the Commission does not provide a timely approval of a cost-of-service rate that is satisfactory to Exelon then it will elect to retire.³⁸ Currently, Exelon has until July 6, 2018 to determine whether it will retire or participate in FCA 13, and ISO-NE has asked the Commission to extend that deadline as part of its Tariff waiver request.³⁹

Second, the Commission has not even decided whether to approve, reject, or take alternative action in connection with either the ISO-NE Petition or the Exelon Filing. ISO-NE is awaiting Commission action on whether it may retain Mystic 8 & 9 for fuel security needs. Similarly, as explained above, the Commission must also take action in the Exelon Proceeding before Exelon will make a determination on whether to be retained for reliability or whether to leave the market. Both of these proceedings, which are inextricably linked to the Complaint, are currently pending before the Commission and are in early stages. ISO-NE had not even filed an answer in the Tariff Waiver Proceeding as of this filing and the initial comment deadline in the Exelon Proceeding is today.

In *NextEra*, the Commission confronted a complaint that similarly was not ripe for consideration. Complainants had alleged in their section 206 filing that state regulators in several New England states were “on the verge of implementing” policies intended to suppress

³⁶ See generally *id.*

³⁷ See *id.* at 4; Exelon Filing at 9 (citing Market Rule 1, Section III.13.1.2.3.1.5.1(c)).

³⁸ See ISO-NE Petition at 4; Exelon Filing at 1, 3.

³⁹ ISO-NE Petition at 20-21.

prices in the ISO-NE markets.⁴⁰ This did not pass the hurdle set by section 206. The Commission found that the claims were “speculative” and failed to provide “sufficient evidence of harm.”⁴¹ The Commission stated that “[t]he circumstances giving rise to the [c]omplaint are in a state of flux and the Commission does not have before it the concrete facts necessary to determine whether the tariff will be unjust and unreasonable.”⁴² The Commission noted that projects relating to the potential state actions set forth in the Complaint were “undetermined at this time” and listed several issues related to a project that had not been resolved.⁴³

NEPGA makes the same speculative argument in this case. Apparently viewing ISO-NE as “on the verge” of retaining Mystic 8 & 9 for reliability (and, perhaps, retaining other resources for fuel security in the future), NEPGA asks the Commission to fast-track an immediate and extraordinary remedy with substantial implications for the ISO-NE markets and with the potential for consumers to double pay for capacity. NEPGA’s entire argument, however, is premised on the *possibility* of these units participating in FCAs 13 and 14. There is no evidence of harm. Like *NextEra*, the issues raised in the Complaint are in flux. Exelon may ultimately elect to retire Mystic 8 & 9, even if ISO-NE wishes to retain the units for reliability. The deadline for Exelon’s decision is still a month away, and that deadline may be extended depending on the Commission’s action on the ISO-NE Petition.

Moreover, Exelon’s retirement decision will be influenced by the Commission’s action in the two open proceedings only recently initiated, the Tariff Waiver Proceeding and the Exelon Proceeding. Depending on the Commission’s action in those proceedings, the clearing rules that

⁴⁰ *NextEra* at P 1.

⁴¹ *Id.* at P 16.

⁴² *Id.* at P 15.

⁴³ *Id.*

NEPGA references may never be implemented for Mystic 8 & 9. The Commission cannot adjudicate, under section 206 of the FPA, speculative harm that *may* occur. *NEPGA II*, 879 F.3d at 1200 (“In a proceeding under FPA § 206 . . . the challenging party, whether the Commission or a complainant, carries the burden of proving a rate *is* unjust and unreasonable.”) (emphasis added).⁴⁴

Perhaps recognizing that the Commission may not view the Complaint as ripe for consideration, NEPGA notes that it filed a protest in the Tariff Waiver Proceeding and states that the Complaint is intended “to ensure that the issue of just and reasonable capacity prices in FCA 13 is squarely queued up for the Commission.”⁴⁵ Queuing up an issue is, of course, not the standard under section 206. NEPGA is required to demonstrate sufficient evidence of harm. NEPGA has produced only speculation of harm and fails to provide the threshold support required by law for the Commission to take action on its Complaint.

2. Treating Resources Retained for Fuel Security as Price Takers is Economic and Consistent with Commission Precedent and the FCM Design

a. Commission Precedent Supports the Treatment of Resources Retained for Fuel Security as Price Takers

Contrary to NEPGA’s contention,⁴⁶ the Commission has already rejected the same price suppression claims set forth in the Complaint. NEPGA asserts that the Commission’s order in *Indep. Power Producers of N.Y., Inc. v. N.Y. Indep. Sys. Operator, Inc.*, 150 FERC ¶ 61,214 (2015) (“*IPPNY*”) is inapposite to this proceeding. NEPGA attempts to distinguish *IPPNY* from its Complaint, but it never grapples with a key holding in *IPPNY*, directly on point to this

⁴⁴ See, e.g., *NextEra* at PP 15-16; *Michigan Electric* at PP 15-16; *CSOLAR* at P 47.

⁴⁵ Complaint at 2.

⁴⁶ *Id.* at 25-35.

proceeding and fatal to NEPGA’s claim, that reliability-must-run (“RMR”) units’ zero-priced offers into the capacity market are economic and competitive.⁴⁷ Consistent with this holding, last year the Commission affirmed its rejection of a NYISO proposal that would have required RMR resources to offer into the capacity market at a price exceeding \$0.00/kW-month.⁴⁸

i. IPPNY

In *IPPNY*, the Commission denied the complaint that electric power generators brought against NYISO, leaving intact NYISO’s market rules that offered RMR resources into the capacity market at *de minimus* prices.⁴⁹ The Commission referred to the analysis of David B. Patton, Ph. D., in reaching its decision. Dr. Patton, who served as NYISO’s market monitor (and currently serves as ISO-NE’s external market monitor), submitted an affidavit in the proceeding that was attached to NYISO’s answer to the complaint (“Patton Affidavit”).⁵⁰

The Commission adopted Dr. Patton’s analysis:

We agree with Dr. Patton that “the units are economic from the perspective of satisfying the NYISO’s reliability requirements. . . . If the reliability needs satisfied by these units were reflected in the capacity market, the units would both clear.” As Dr. Patton notes, these units would also contribute to addressing . . . the local reliability need. Thus, we agree with Dr. Patton that “it is efficient for these units to clear in the NYISO capacity market, [and] [a]ny provisions imposed that would cause them not to clear would be unreasonable.”⁵¹

⁴⁷ *IPPNY* at P 66.

⁴⁸ *N.Y. Independ. Sys. Operator, Inc.*, 161 FERC ¶ 61,189 (2017) (“2017 Order”), *order on reh’g & compliance*, 155 FERC ¶ 61,076 (2016) (“2016 Order”), *order on reh’g & compliance* (2016), 150 FERC ¶ 61,116 (2015) (collectively, the “RMR Cases”).

⁴⁹ *IPPNY* at PP 64-65.

⁵⁰ Answer of the New York Independent System Operator, Inc., Docket No. EL13-62-000 (filed May 30, 2013).

⁵¹ *IPPNY* at P 66 (citations omitted).

Dr. Patton elaborated on this rationale, stating that “[i]f the planning need being satisfied by the [RMR units] were fully specified in the capacity market, these units would both clear and the price at their locations would generate revenue sufficient to keep them in operation if they were the lowest-cost means to satisfy the needs – hence, they would be revenue adequate and economic.”⁵² Dr. Patton concluded that “[t]he fact that the markets do not reflect this reliability need makes the units no less economic and makes it no more justifiable to mitigate” the RMR units.⁵³

The Wilson Affidavit concisely summarizes Dr. Patton’s analysis and the Commission’s finding:

Dr. Patton uses the term “revenue inadequate” to refer to generating plants that do not receive adequate revenues *under the current market design* to remain in operation. Such units will generally seek to retire, and if the [Regional Transmission Organization] finds that the units are needed for reliability in the near term, an RMR arrangement will typically result. Under Dr. Patton’s terminology, the RMR units, while *revenue inadequate* under the current market design, are nevertheless “economic”, that is, *they are not “uneconomic”*, because they are needed for reliability, at least in the near term. As [IPPNY] notes . . . under a better market design that reflected all reliability needs of the system, the needed RMR units would receive adequate revenue, and it would be clear that they are economic. Under an imperfect market design, the plants, while needed for reliability and, therefore, economic, are revenue inadequate, and the RMR arrangement is the short-term measure that corrects the shortcoming in the market design and makes the plants revenue adequate.⁵⁴

The Commission further explained in *IPPNY* that the RMR units’ low capacity market offers are fully consistent with their going-forward costs and a competitive market outcome. The

⁵² Patton Aff. at ¶ 22.

⁵³ *Id.*

⁵⁴ Wilson Aff. at ¶ 18 (emphasis in original).

RMR units had low going-forward costs because, as the Commission explained, the RMR revenues must be accounted for in that calculation: the units “would clear a capacity market that also reflected local reliability needs” and the RMR revenues provided to these units “reflect the value of the services provided by these resources to customers.”⁵⁵ Accordingly, the Commission found that “[i]n calculating the going forward costs of these two resources, it is reasonable to deduct their [RMR] revenues, because the revenues do not overstate the value provided by the resources to customers.”⁵⁶ The same is true here. As the Wilson Affidavit explains, in the same way that revenues earned in the energy and ancillary services markets reduce a resource’s going-forward costs, so should revenues earned from RMR arrangements be reflected in the resource’s offer.⁵⁷

Mr. Wilson reviewed and supports the rationale underlying the Commission’s precedent, concluding that “it is a sound policy and fully applicable to the case we have here.”⁵⁸ Mr. Wilson believes it is appropriate for Mystic 8 & 9 to be offered into FCAs 13 and 14 as price takers.⁵⁹ As background, he explains that “[t]he most common circumstance that leads to an RMR arrangement is a generating unit located in a load pocket that is needed for local reliability, but the load pocket is not modeled in the capacity market. The short-term solution is the RMR arrangement, and the longer-term solution is either transmission enhancements that eliminate the load pocket, or modeling the load pocket as a separate zone, potentially with a separate price, in

⁵⁵ *IPPNY* at P 66.

⁵⁶ *Id.* (citation omitted). See Wilson Aff. at ¶ 19 (summarizing Patton Affidavit).

⁵⁷ Wilson Aff. at ¶ 19.

⁵⁸ *Id.* at ¶ 10; see also *id.* at ¶ 13.

⁵⁹ *Id.* at ¶ 10.

the capacity market.”⁶⁰ Here, ISO-NE’s reliability need relates to “fuel security, not local capacity.”⁶¹ Similar to “some local capacity needs, this fuel security need is not presently captured in the ISO-NE markets.”⁶² Mr. Wilson continues:

ISO-NE has identified that Mystic 8 & 9 are needed to maintain reliability, so they are, therefore, economic (under Dr. Patton’s use of the term, which the Commission has adopted), while revenue inadequate. The proposed RMR arrangement, applicable for two capacity commitment periods, provides the revenue needed by the resources, and results in their going-forward costs becoming *de minimus*. Therefore, it is appropriate for Mystic 8 & 9 to offer into FCAs 13 and 14 as price takers. The Commission’s policy in [IPPNY] is correct, and is applicable here.⁶³

NEPGA’s argument that *IPPNY* is inapplicable to this proceeding is plainly wrong.

There is, as the Wilson Affidavit notes, essentially a “missing market” for fuel security in New England: ISO-NE’s “current market design acquires resource adequacy but not fuel security.”⁶⁴ Like the RMR units at issue in *IPPNY*, Mystic 8 & 9 are economic but revenue inadequate under Commission policy. If the market reflected the fuel security needs ISO-NE has identified, resources providing those fuel security services would receive adequate revenue and would clear the market. In the absence of this market, the revenues Mystic 8 & 9 may receive under a Commission-approved cost-of-service arrangement should be netted out from their going-forward costs, consistent with *IPPNY*. This is likewise consistent with the FCM design, which

⁶⁰ *Id.* at ¶ 20.

⁶¹ *Id.* at ¶ 21.

⁶² *Id.*

⁶³ *Id.*

⁶⁴ *Id.* at ¶ 27. NESCOE’s discussion of this issue should not be construed as an endorsement of any potential market solution to address fuel security challenges. ISO-NE’s identification of fuel security risks in connection with Mystic 8 & 9 and other facilities is an emerging discussion and there could be a variety of solutions developed.

reduces going-forward costs based on a resource's energy and ancillary services market revenues.⁶⁵

The Complaint recognizes that ISO-NE is working to develop a long-term, market-based proposal to value fuel security.⁶⁶ Before ISO-NE implements any such solution, it must more clearly identify the precise problem to be solved and provide additional analysis to enable risk-informed judgments about the range of possible solutions. In the meantime, resources retained for fuel security should be treated as price takers in the FCM as Commission precedent requires.⁶⁷

ii. RMR Cases

The RMR Cases lend further support for the Commission's finding in *IPPNY* that entering those RMR resources into the capacity market as price takers is consistent with a competitive market outcome. In the 2017 Order, the Commission affirmed its rejection of a NYISO proposal to price RMR resources in the capacity market at an amount exceeding \$0.00/kW-month.⁶⁸ In that initial rejection, the 2016 Order, the Commission found that "RMR generators are needed to maintain reliability, but they have not received sufficient market revenues to continue operations and therefore seek to deactivate."⁶⁹ Citing *IPPNY*, the Commission stated that it "continue[d] to believe that RMR generators should not be subject to a capacity minimum offer price because RMR generators are needed to fulfill a reliability need

⁶⁵ See *id.* at ¶ 19.

⁶⁶ Complaint at 5. See ISO-NE Petition at 31-32 (stating that ISO-NE "plans to file a market-based proposal to address long-term fuel security in the second half of 2019.").

⁶⁷ Indeed, it would be arbitrary and capricious and a violation of the Administrative Procedure Act, 5 U.S.C. § 706, for the Commission to reverse its position in *IPPNY* without sufficiently explaining why it has abandoned its previous position. See *NEPGA III*, 881 F.3d at 211-213; *NEPGA II*, 879 F.3d at 1201.

⁶⁸ 2017 Order at P 62; see also *id.* at PP 54-55.

⁶⁹ 2016 Order at P 82.

that market forces have not fulfilled.”⁷⁰ The Commission held that such a minimum offer price “would allow for inefficient outcomes and is thus unreasonable.”⁷¹

The Commission further explained why this outcome would be inefficient:

. . . imposing a higher offer price [than \$0.00/kW-month] may result in an RMR generator not clearing the market, and another generator that otherwise would not have cleared the market clearing instead, thereby requiring ratepayers to pay twice to satisfy the same capacity need. . . . RMR generators “are needed to fulfill a reliability need that market forces have not fulfilled,” and therefore, “should not be subject to a capacity minimum offer price” that would allow for inefficient and unreasonable outcomes.^[72]

The Complaint purports to “dispel” any notion that forcing a change in the way Mystic 8 & 9 offer into the FCA will require consumers “to pay twice for ‘redundant capacity.’”⁷³ But NEPGA lobs no attempt to confront the Commission’s determination in the RMR Cases that consumers *will be required* “to pay twice to satisfy the same capacity need,”⁷⁴ a finding that is directly at odds with NEPGA’s claim. NEPGA then tries to lure the Commission into the web of RTR Exemption Cases, which NEPGA references repeatedly throughout the Complaint. The Commission should reject this gambit and focus on the proceedings that are directly on point, *IPPNY* and the RMR Cases.⁷⁵

⁷⁰ *Id.* at P 83.

⁷¹ *Id.*

⁷² 2017 Order at P 55 (quoting 2016 Order at PP 82-83).

⁷³ Complaint at 35.

⁷⁴ 2017 Order at P 55.

⁷⁵ Similarly, the Commission should not get ensnared in NEPGA’s repeated references to *ISO New England Inc.*, 162 FERC ¶ 61,205 (2018) (“CASPR Order”). NEPGA cites to the CASPR Order to support its claims regarding market price suppression. However, as discussed in this Protest, the Commission has repeatedly held that the types of resources at issue in this proceeding are economic and offer into the market competitively.

Likewise, NEPGA’s reference to two U.S. Court of Appeals decisions⁷⁶ are a distraction. NEPGA overlooks that both cases centered on the Commission’s statutory responsibility to balance competing interests in reaching a decision, and *New Jersey* explicitly recognized that the Commission can weigh, *inter alia*, the danger to consumers of “over-mitigation” of resource offers in the capacity market. *New Jersey*, 744 F.3d at 109 (“Surely FERC is permitted to weigh the danger of price suppression against the counter-danger of over-mitigation, and determine where it wishes to strike the balance.”); *NEPGA I*, 757 F.3d at 298.

The RMR Cases thus set forth two rationales for ensuring that RMR resources enter the capacity auction as price takers. The first rationale, provided initially in *IPPNY* and discussed in detail above, is that these resources are economic but revenue inadequate. The second rationale is that consumers could be required to pay for duplicative capacity if the resources fail to clear the market, a violation of the FPA’s prohibition against excessive charges. *Xcel Energy Servs. Inc. v. FERC*, 815 F.3d 947, 952 (D.C. Cir. 2016) (“*Xcel Energy*”); see *FERC v. Elec. Power Supply Ass’n*, 136 S. Ct. 760, 781 (2016). NEPGA has failed to address how its Complaint can go forward when Commission precedent clearly establishes the justness and reasonableness of treating the resources at issue as price takers.

b. NEPGA’s “Five Reasons” for Ignoring *IPPNY* Fail Under Scrutiny

While NEPGA ignores a key holding in *IPPNY*—as well as the RMR Cases—it proceeds to argue why *IPPNY* has no bearing in this proceeding.⁷⁷ NEPGA makes five points. All of them are without merit.

⁷⁶ Complaint at 36, citing to *N.J. Bd. of Pub. Util. v. FERC*, 744 F.3d 74 (3rd Cir. 2014) (“*New Jersey*”) and *New England Power Generators Ass’n, Inc. v. FERC*, 757 F.3d 283 (D.C. Cir. 2014) (“*NEPGA I*”).

⁷⁷ Complaint at 31-35.

First, NEPGA argues that *IPPNY* is inapplicable because it addressed a short-term reliability need while any cost-of-service agreement for Mystic 8 & 9 should be viewed as a long-term agreement.⁷⁸ It states that the cost-of-service agreement that Exelon filed with the Commission is a two-year agreement.⁷⁹ NEPGA then appears to backtrack from this statement, leaping to the conclusion that the agreement should instead be viewed as “long-term.”⁸⁰ Its sole support for this contention is that “ISO-NE is in the process of developing Tariff language defining the criteria for holding a resource for fuel security, for effect through FCA 15.”⁸¹ NEPGA does not explain how an agreement that the Commission would approve for a two-year term could transform into a “long-term” agreement nor how criteria that is only under development provides a sufficient justification for concluding that the contract term for Mystic 8 & 9 would be affected.

Second, NEPGA argues that the Commission’s decision in *IPPNY* was based in part on the complainant’s failure to show that *de minimis* capacity market offers would damage the NYISO markets.⁸² NEPGA states that the Complaint is needed to prevent harm to the ISO-NE markets.⁸³ This argument, however, mischaracterizes *IPPNY*. There, the Commission found:

While [the complainant] would have the Commission direct NYISO to change its existing mitigation rules in the capacity market, it has not demonstrated harm to the market in its original [c]omplaint *that justifies excluding the Cayuga or Dunkirk units* or conduct that is inconsistent with competitive bidding behavior.⁸⁴

⁷⁸ *Id.* at 31-32.

⁷⁹ *Id.* at 32.

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.* at 33.

⁸³ *Id.*

⁸⁴ *IPPNY* at P 65 (emphasis added).

As the Wilson Affidavit explains, “the Commission’s policy recognizes and accepts that there can be some price impact as a result of RMR resources during the limited period the RMR arrangement is in effect.”⁸⁵

In addition, to the extent there is a price impact, it is the result of a competitive outcome because the Commission has found that treating these resources as price takers is economic.⁸⁶ For this reason, NESCOE agrees with NEPGA that “it is a *false choice* to suggest that the Commission must either ensure fuel security or permit price suppression in FCA 13 and FCA 14.”⁸⁷ Again, the Commission has rejected the argument that price distortion is a byproduct of the capacity market rules at issue in the Complaint.

Third, NEPGA views *IPPNY* as inapposite because ISO-NE has sought to retain Mystic 8 & 9 for “fuel security” instead of “resource adequacy.”⁸⁸ NESCOE agrees that ISO-NE is not seeking to retain these units for resource adequacy but, rather, for a fuel security service that ISO-NE has determined is not currently valued in the market. That’s the point of the Commission’s holding in *IPPNY* that these types of resources are economic. The Wilson Affidavit sums up why NEPGA misses the mark:

[NEPGA’s argument] fails to recognize the underlying rationale for the Commission’s policy, which has to do with planning needs that are not captured by the current market design. The proposed Mystic 8 & 9 cost-of-service agreement is indeed an “administrative substitute” for market design changes that will value fuel security and result in market revenues for units that provide fuel security. Market design changes to value fuel security

⁸⁵ Wilson Aff. at ¶ 25.

⁸⁶ See *supra* section III.B.2.a.

⁸⁷ Complaint at 26 (emphasis in original).

⁸⁸ *Id.* at 33-34.

may be within the capacity market (similar to transmission constraints), or may be outside of the capacity market (and result in revenues that will offset going forward costs, and lower capacity market offer prices). The current market design acquires resource adequacy but not fuel security.”^{89]}

Contrary to NEPGA’s assertion, *IPPNY* is directly on point *because* Mystic 8 & 9 are being retained for fuel security.⁹⁰

Fourth, NEPGA claims that its proposed replacement design provides a solution for integrating resources retained for fuel security into the market.⁹¹ Section III.C of this Protest explains why NEPGA’s proposal would result in consumers paying for redundant capacity and is contrary to Commission precedent.

Finally, NEPGA argues that if “the Commission believes that *IPPNY* requires that the Commission deny the complaint in this proceeding, the Commission should grant rehearing of its order in *IPPNY* and issue orders in both proceedings that are consistent with the Commission’s statutory obligations and ensures just and reasonable rates.”⁹² NEPGA fails to accompany its request with any legal authority to support the action it would have the Commission take. This omission should not belie the extraordinary step such action would constitute: abandoning Commission policy enunciated over multiple orders. In addition to *IPPNY*, the Commission would need to contend with the RMR Cases, with the latest order in that series of proceedings

⁸⁹ Wilson Aff. at ¶ 27.

⁹⁰ In the 2017 Order, the Commission addressed generators’ claims that the RMR resources at issue should be mitigated because, unlike resources retained to satisfy a local transmission reliability need, RMR resources retained for resource adequacy needs should be subject to an offer floor price. 2017 Order at P 62. The Commission rejected this claim, finding that the record failed to demonstrate “under what circumstances NYISO would need an RMR for resource adequacy, and thus . . . would need to be subject to an offer floor.” *Id.* This proceeding likewise does not provide a forum to adjudicate that issue: ISO-NE has identified a reliability product, fuel security, that is separate from resource adequacy.

⁹¹ Complaint at 34.

⁹² *Id.*

issued just last year. Courts will closely scrutinize the Commission’s sudden departure from its precedent. *Accord, NEPGA III*, 881 F.3d at 211-213; *NEPGA II*, 879 F.3d at 1201. In addition, overturning *IPPNY* would implicate numerous and core features of capacity markets, such as offer pricing and mitigation. Unwinding the Commission’s decision in *IPPNY* could trigger a flood of petitions seeking changes across the capacity markets that the Commission oversees.

c. The Sotkiewicz Affidavit Ignores Commission Precedent

The Sotkiewicz Affidavit operates from a misunderstanding of the Commission’s policy regarding RMR resources. It claims that allowing resources retained for fuel security to enter the market as price takers violates the “first principles” of capacity markets.⁹³ That conclusion is based on Dr. Sotkiewicz’s view of these resources as “non-competitive.”⁹⁴ This is plainly contrary to Commission precedent.

As the Wilson Affidavit explains, Dr. Sotkiewicz’s analysis:

pertains not to economic, needed resources that are revenue inadequate in the current markets and must be retained for reliability reasons, but to uneconomic resources that are only remaining in operation due to some sort of subsidy. . . . Commission policy is that RMR units can be economic, and are only revenue inadequate because the planning needs they satisfy are not addressed in the current markets. Therefore, his discussion is inapplicable to the case at hand.⁹⁵

The Wilson Affidavit also notes a material omission from Dr. Sotkiewicz’s analysis. The Sotkiewicz Affidavit recounts that another “principle” of the capacity markets is that they should “result in the selection of the least-cost set of resources that possess the attributes necessary to

⁹³ Sotkiewicz Aff. at ¶¶ 35-37.

⁹⁴ *Id.* at ¶¶ 36-37; *see generally id.* at ¶¶ 38-54.

⁹⁵ Wilson Aff. at ¶ 30.

maintain reliability.”⁹⁶ Dr. Sotkiewicz then states that “[t]reating fuel secure resources as price takers impairs the ability of a capacity market to achieve the objective of selecting a least-cost set of resources.”⁹⁷ Mr. Wilson highlights that this conclusion inexplicably “drops the ‘attributes necessary to maintain reliability’ part of the principle.”⁹⁸ He further notes: “Since the fuel-security RMR units are required for reliability, they certainly belong in the least cost mix of resources.”⁹⁹

3. NEPGA’s Analysis Showing Price Suppression Is Fundamentally Flawed

NEPGA’s analysis is skewed. The Complaint’s estimates of the price impacts related to Mystic 8 & 9 participating in the market as price takers are, as the Wilson Affidavit explains, “greatly overstated.”¹⁰⁰ The Wilson Affidavit further explains that the estimates “ignore the fact that market participants anticipate and adjust their plans based on the presence (or absence) of other resources in the market, and the impact of the entry or exit of other resources on the supply/demand balance and anticipated prices.”¹⁰¹ NEPGA’s analysis is fundamentally flawed because “Dr. Sotkiewicz simply ‘shifts’ a fixed supply curve, which overstates the impact under nearly all circumstances. A lower bound for the price suppression due to the plants would be zero – if market participants would have offered a comparable amount of new replacement capacity, had the Mystic [8 & 9] plants been retired.”¹⁰²

⁹⁶ Sotkiewicz Aff. at ¶ 44.

⁹⁷ *Id.* at ¶ 46.

⁹⁸ Wilson Aff. at ¶ 31.

⁹⁹ *Id.*

¹⁰⁰ *Id.* at ¶ 12.

¹⁰¹ *Id.*

¹⁰² *Id.* See also *id.* at ¶¶ 36-37.

The Wilson Affidavit provides further support for this conclusion:

Competitive new resources frequently offer at low prices, so it is quite possible that an equivalent quantity of new generation would clear in place of Mystic 8 & 9. If this occurs (MW for MW replacement), then the price impact of removing them would be exactly zero (or, viewing the example the other direction, the price impact of *including* them in the auctions, so they clear and the replacement capacity does not, would be zero). Thus, the “lower bound” on price impact is clearly zero, if not negative (negative occurs if the replacement resource is larger than Mystic 8 & 9).^{103]}

NEPGA’s analysis does not account for this lower bound impact, which, of course, would undercut the central premise of its Complaint. The Commission should give no weight to its claims regarding price impacts and market consequences.

C. NEPGA’s Proposed Remedy Would Force Consumers to Pay Twice for Capacity and Could Exacerbate Fuel Security Concerns

The Commission should deny the Complaint for the reasons set forth above. However, should it find that NEPGA has met its burden in demonstrating that ISO-NE’s treatment in the capacity market of resources retained for reliability is unjust and unreasonable, it should not adopt NEPGA’s proposed remedy. NEPGA’s recommended approach for integrating fuel secure resources retained for reliability into the market is contrary to Commission precedent, would violate the FPA’s prohibition of excessive costs, and could intensify the region’s fuel security challenges.

NEPGA’s preferred solution would dramatically change the way resources retained for fuel security could participate in the FCM. It would mitigate the prices that these resources offer into the auction, requiring use of their Retirement De-List prices.¹⁰⁴ If the resource fails to

¹⁰³ *Id.* at ¶ 37 (emphasis in original).

¹⁰⁴ *See* Complaint at 5-6, 19-25.

obtain a Capacity Supply Obligation—and they very likely will *not* as discussed below—that resource can participate in subsequent ARAs.¹⁰⁵

NEPGA cloaks its design under the veil of a model “market-based solution,” but its effect is to make consumers buy capacity twice. The Wilson Affidavit makes this point: “If Mystic 8 & 9 are essentially removed from [the primary] auctions, other capacity would clear instead, and consumers would pay for the other capacity in addition to bearing the full cost of Mystic 8 & 9 under the cost of service arrangements – that is, consumers would bear the cost of duplicative capacity, also known as ‘paying twice’.”¹⁰⁶ Moreover, “[t]o the extent other resources are not available or very high cost, very little other capacity might clear as a result of the high offer prices for the Mystic [8 & 9] units, and the FCA clearing price would spike to high levels.”¹⁰⁷

While the proposed approach “allows the units to offer as price takers and clear in the [ARAs] . . . this does not cure the ‘pay twice’ problem and introduces other problems.”¹⁰⁸ The Wilson Affidavit discusses how consumers will be made to pay for duplicative capacity. Mr. Wilson explains that “pushing this capacity into the ARA, without any matching demand, could result in the ARA clearing at a very low or even zero price, in which case there is no offset to the RMR costs.”¹⁰⁹ There are collateral consequences to this approach: “It would also distort [the ARAs] and undermine their purpose of allowing market participants to adjust their capacity

¹⁰⁵ *See id.*

¹⁰⁶ Wilson Aff. at ¶ 11; *see also id.* at ¶¶ 32, 34.

¹⁰⁷ *Id.* at ¶ 32.

¹⁰⁸ *Id.* at ¶ 11.

¹⁰⁹ *Id.* at ¶ 34.

commitments. Some market participants would also likely adjust their offer strategies into the FCAs in anticipation of the ARAs likely failing to offer reasonable prices for capacity.”¹¹⁰

In addition, the proposed remedy could compound ISO-NE’s fuel security concerns. If the new mitigation applied to fuel security resources results in other resources clearing “that would not otherwise have cleared, there is of course no guarantee that these other resources would be fuel secure, since fuel security in general increases cost.”¹¹¹ Consequently, “the FCAs could well clear a mix of resources that fails to meet ISO-NE’s identified reliability needs, and could exacerbate the fuel security problem.”¹¹²

The Commission has definitively rejected, as inefficient and unreasonable, an approach to RMR units that would require consumers to pay twice for capacity. In the RMR Cases, discussed above, the Commission declined to accept a NYISO proposal that would impose a capacity minimum offer price on these resources. The Commission found that “imposing a higher offer price [than \$0.00/kW-month] may result in an RMR generator not clearing the market, and another generator that otherwise would not have cleared the market clearing instead, thereby requiring ratepayers to pay twice to satisfy the same capacity need.”¹¹³ The Commission concluded that such a proposal would result in “inefficient and unreasonable outcomes.”¹¹⁴ As the Wilson Affidavit demonstrates, NEPGA’s proposal would similarly require consumers to purchase redundant capacity and would be unjust and unreasonable. Consistent with the RMR Cases, the Commission should decline to adopt NEPGA’s approach.

¹¹⁰ *Id.*

¹¹¹ *Id.* at ¶ 32.

¹¹² *Id.*

¹¹³ 2017 Order at P 55; *see* 2016 Order at PP 82-83.

¹¹⁴ 2017 Order at P 55.

Moreover, requiring consumers to pay twice for capacity would impose excessive costs in violation of the FPA. *Xcel Energy*, 815 F.3d at 952; accord, *Pennsylvania Water & Power Co. v. FPC*, 343 U.S. 414, 418 (1952), *Mun. Light Boards v. FPC*, 450 F.2d 1341, 1348 (D.C. Cir. 1971), *cert. denied*, 405 U.S. 989 (1972). It is the Commission’s duty to prevent such costs from taking effect. “The Commission stands as the watchdog providing ‘a complete, permanent and effective bond of protection from excessive rates and charges.’” *Jersey Cent. Power & Light Co. v. FERC*, 810 F.2d 1168, 1207 (D.C. Cir. 1987) (Starr, J., concurring) (quoting *Atl Ref. Co. v. Pub. Service Comm’n*, 360 U.S. 378, 388 (1959)). The Commission should reject NEPGA’s proposed remedy consistent with its statutory obligations under the FPA.

D. The Commission Should Deny NEPGA’s Request for Fast-Track Processing

NEPGA requests that its Complaint be adjudicated under the Commission’s fast-track processing procedures. 18 C.F.R § 385.206(h). However, NEPGA fails to explain adequately why the Commission’s standard processes would be insufficient for expeditiously resolving the Complaint, as is required under Rule 206(b)(11) of the Commission’s Rules of Practice and Procedure. The Commission should reject the request.

NEPGA seeks an aggressive timeframe for Commission action. It asks for a Commission order within 40 days from the filing of the Complaint, the same date that the ISO-NE Petition, filed weeks earlier, requested Commission action.¹¹⁵ NEPGA claims that a fast-track schedule is warranted because Mystic 8 & 9 will distort market prices beginning in FCA 13.¹¹⁶ Then,

¹¹⁵ See Complaint at 37.

¹¹⁶ *Id.*

NEPGA argues that accelerated action is needed to provide certainty to market participants in advance of FCA 13.¹¹⁷

None of these rationales warrant an expedited track for Commission action in this proceeding. First, as demonstrated in this Protest, the Commission has soundly rejected the argument that treating resources such as Mystic 8 & 9 as price takers in the capacity market constitutes market distortion. Moreover, as also explained in this Protest, the Complaint is not ripe for consideration and any harm NEPGA alleges is contingent on other actions, including the Commission's approval of the ISO-NE Petition and the Exelon Filing.

Second, NEPGA does not explain why market participants need action within such a constrained time period when the next auction, FCA 13, will not even be held until *February 2019*. NESCOE recognizes that market participants will begin the process of developing capacity offer prices months before the auction occurs. Similarly, there is an offer review process involving the internal market monitor that takes place in advance of the auction. However, beyond noting generally and vaguely that "market participants are preparing for participation in FCA 13," NEPGA fails to explain, as it must, why the current activities of market participants warrant an accelerated timetable for its Complaint. Tellingly, NEPGA provides no calendar for FCA 13 to justify its request.

In contrast to NEPGA's request, there is evident and ample reason to maintain the Commission's standard process for this proceeding. As detailed above, the market rules that the Complaint implicates cannot be viewed in isolation but, rather, must be considered holistically. As ISO-NE noted in response to a past complaint, "[t]he FCM is a complex market, and changes should not be made without consideration of the extent to which seemingly small changes may

¹¹⁷ *Id.*

impact the operation of the market.”¹¹⁸ The hurried process that NEPGA proposes creates a hazard for unintended consequences, which could in turn create more process to consider and revise, as necessary, other affected market rules. Furthermore, while NEPGA expresses concern for lack of market certainty, it fails to recognize the destabilizing effect created by a sudden change to a long-standing and consequential rule.

NEPGA has not demonstrated the need for fast-track processing. NESCOE urges the Commission to reject its request.

IV. CONCLUSION

For the reasons stated herein, NESCOE respectfully requests that the Commission deny the Complaint, reject NEPGA’s request for fast-track processing, and take other necessary and appropriate actions consistent with this Protest.

Respectfully Submitted,

/s/ Jason Marshall

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Date: June 6, 2018

¹¹⁸ Answer of ISO New England Inc., Docket No. EL14-17-000 (filed Jan. 17, 2014), at 7.

CERTIFICATE OF SERVICE

In accordance with Rule 2010 of the Commission's Rules of Practice and Procedure, I hereby certify that I have this day served by electronic mail a copy of the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Cambridge, Massachusetts this 6th day of June, 2018.

/s/ Jason Marshall _____

Jason Marshall

General Counsel

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ATTACHMENT A

Affidavit of James F. Wilson
In Support of the Protest of
New England States Committee on Electricity

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

New England Power Generators Association,)	
)	
Complainant)	Docket No. EL18-154-000
v.)	
ISO New England Inc.)	
Respondent)	

**AFFIDAVIT OF JAMES F. WILSON
IN SUPPORT OF THE PROTEST OF
NEW ENGLAND STATES COMMITTEE ON ELECTRICITY**

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**AFFIDAVIT OF JAMES F. WILSON
IN SUPPORT OF THE PROTEST OF
NEW ENGLAND STATES COMMITTEE ON ELECTRICITY**

I. Introduction

1. My name is James F. Wilson. I am an economist and independent consultant doing business as Wilson Energy Economics. My business address is 4800 Hampden Lane Suite 200, Bethesda, MD 20814.

2. I have over thirty years of consulting experience in the electric power and natural gas industries. Many of my past assignments have focused on the economic and policy issues arising from the introduction of competition into these industries, including restructuring policies, market design, market analysis and market power. Other recent engagements have included resource adequacy and capacity markets, contract litigation and damages, forecasting and market evaluation, pipeline rate cases and evaluating allegations of market manipulation. I also spent five years in Russia in the early 1990s advising on the reform, restructuring, and development of the Russian electricity and natural gas industries for the World Bank and other clients. I have submitted affidavits and presented testimony in proceedings of the Federal Energy Regulatory Commission (“Commission”), state regulatory agencies, and U.S. district court. I hold a B.A. in Mathematics from Oberlin College and an M.S. in Engineering-Economic Systems from Stanford University. My curriculum vitae, summarizing my experience and listing past testimony, is Attachment JFW-1 attached hereto.

3. I have been involved in electricity restructuring and wholesale market design for over twenty years in PJM, New England, Ontario, California, MISO, Russia, and other regions. With regard to the New England and PJM markets, I have also been involved in a broad range of other market design issues over the past several years.

4. On May 1, 2018, ISO New England Inc. (“ISO-NE”) submitted a petition for waiver of certain provisions of its tariff to allow it to retain the Mystic 8 and 9 natural gas-fired generating units (“Mystic 8 & 9”) for the 2022-2023 and 2023-2024 capacity commitment periods.¹ The owner of these units had indicated its intention to retire the units on May 31, 2022. ISO-NE studied the retirements and determined that the loss of those units presented “unacceptable fuel security risks”, and this led to the efforts to retain the plants.²

5. The Waiver Filing noted that under the ISO-NE Tariff, Mystic 8 & 9, as units retained for reliability reasons, would essentially be entered into the Forward Capacity Auctions (“FCAs”) for 2022-2023 and 2023-2024 (FCA 13 and FCA 14) as “price takers” and would receive Capacity Supply Obligations (“CSOs”).³ In this proceeding, the New England Power Generators Association (“NEPGA”) asserts that this would result in unjust and unreasonable and unduly discriminatory prices in these two FCAs.⁴ NEPGA proposes that the Commission require the plants to be offered into the FCAs at their cost-based Retirement De-List prices, and that the plants be allowed to offer and clear as price takers in subsequent reconfiguration auctions for these commitment periods.⁵

6. I was asked by the New England States Committee on Electricity to review the complaint and the supporting affidavit of Paul M. Sotkiewicz, Ph.D. (“Sotkiewicz Affidavit”), and

¹ ISO New England Inc., *Petition of ISO New England Inc. for Waiver of Tariff Provisions*, May 1, 2018 in Docket No. ER18-1509-000 (“Waiver Filing”).

² Waiver Filing, p. 3.

³ Waiver Filing, p. 26, citing to ISO-NE Tariff Market Rule 1 Section III.13.2.3.2(c).

⁴ New England Power Generators Association, Complainant v. ISO New England Inc. Respondent, *Complaint and Request for Expedited Consideration of the New England Power Generators Association*, filed May 23, 2018 in Docket No. EL18-154-000 (“NEPGA Complaint”), p.1.

⁵ NEPGA Complaint, p. 5.

provide my opinion on the merits of the complaint and proposed relief. I was also asked to evaluate Dr. Sotkiewicz's estimates of potential "price suppression" and capacity displacement.

II. Summary

7. Mystic 8 & 9 are revenue inadequate. However, ISO-NE has determined that they are needed for reliability, in particular, for fuel security. ISO-NE's recent Operational Fuel-Security Analysis ("OFSA Report")⁶ found that loss of the Mystic 8 & 9 capacity could result in load shedding under some circumstances.

8. ISO-NE has authority under its tariff to offer cost-based compensation to resources that are needed for reliability but that are revenue inadequate (such arrangements are commonly called Reliability Must Run, or "RMR", contracts). The Commission recognizes that RMR arrangements can be needed for a limited period while market design or transmission solutions to an identified reliability need are developed.

9. Commission policy calls for RMR units to be offered as price takers into capacity markets, and considers such offers consistent with a competitive outcome. Because the capacity is needed for reliability, it is economic (it would be fully compensated under a market design that valued its reliability contribution). The cost-based compensation for such resources reduces their net going-forward cost to de minimus levels, thus the resource's competitive offer into a capacity market is essentially zero. This policy ensures that the RMR capacity is counted toward meeting resource adequacy needs and consumers aren't required to "pay twice" for capacity.

⁶ ISO New England, *Operational Fuel-Security Analysis for Discussion*, January 17, 2018, p. 43.

10. I have examined the underlying rationale for this policy and find that it is a sound policy and fully applicable to the case we have here. Mystic 8 & 9 should be offered as price takers in FCAs 13 and 14.

11. NEPGA's proposed relief would be inconsistent with this policy and likely cause the units to fail to clear in the auctions. NEPGA is apparently most interested in the potential price increase that could be obtained by removing Mystic 8 & 9 from FCA 13 and 14. If Mystic 8 & 9 are essentially removed from these auctions, other capacity would clear instead, and consumers would pay for the other capacity in addition to bearing the full cost of Mystic 8 & 9 under the cost of service arrangements – that is, consumers would bear the cost of duplicative capacity, also known as “paying twice”. NEPGA's proposed relief allows the units to offer as price takers and clear in the annual reconfiguration auctions, however, this does not cure the “pay twice” problem and introduces other problems.

12. With respect to Dr. Sotkiewicz's estimates of the alleged “price suppression” that would be caused by Mystic 8 & 9 offering as price takers, these estimates are greatly overstated. They ignore the fact that market participants anticipate and adjust their plans based on the presence (or absence) of other resources in the market, and the impact of the entry or exit of other resources on the supply/demand balance and anticipated prices. Dr. Sotkiewicz simply “shifts” a fixed supply curve, which overstates the impact under nearly all circumstances. A lower bound for the price suppression due to the plants would be zero – if market participants would have offered a comparable amount of new replacement capacity, had the Mystic plants been retired.

13. To summarize, the Commission's existing policy in this regard is applicable, and, therefore, the Complaint should be denied. It is appropriate for Mystic 8 & 9 to be offered into FCAs 13 and 14 as price takers. Granting the requested relief would result in the plants failing to

receive CSOs in these FCAs, and could also result in attracting and clearing replacement resources that are not fuel secure, exacerbating the fuel security problem.

14. The next section of this affidavit discusses the Commission's policy regarding how RMR units are offered into capacity markets, and how this policy applies to the Mystic 8 & 9 units. Section IV evaluates the proposed relief. Finally, Section V evaluates Dr. Sotkiewicz's estimates of the price suppression and displacement that could result if the plants are offered as price takers.

III. Commission Policy on Offers from RMR Units into Capacity Auctions

15. The key issue raised by the Complaint is whether the Mystic 8 & 9 capacity should be offered into FCAs 13 and 14 as price takers (or, equivalently, at *de minimus* prices), or instead at higher, cost-based prices, as the Complaint requests.

16. The Commission's policy in this regard was enunciated in an order in a New York ISO complaint proceeding in 2015 ("IPPNY Order"⁷), as the Complaint acknowledges (at 31). In the IPPNY Order, the Commission denied the complaint, leaving in place tariff rules that allowed RMR units to be offered into the NYISO's capacity market at *de minimus* prices (PP 64-65). To evaluate whether the Commission's policy as stated in the IPPNY Order is applicable here, or whether the circumstances call for a different policy, it is necessary to examine the rationale for the Commission's finding in detail.

17. The rationale for the Commission's finding in the IPPNY Order was elaborated by David B. Patton, Ph. D., in an affidavit attached to the New York ISO's answer to the complaint

⁷ Independent Power Producers of New York, Inc. v. New York Independent System Operator, Inc., Order Denying Complaint, 150 FERC ¶ 61,214 (2015) ("IPPNY Order").

in that proceeding (“Patton Affidavit”).⁸ Dr. Patton serves as the independent Market Monitoring Unit for the New York ISO (and also serves in a similar role for ISO-NE, the Midcontinent Independent System Operator, and the Electric Reliability Council of Texas). The IPPNY Order (at P 66) referenced the Patton Affidavit (P 26) as follows:

66. We agree with Dr. Patton that “the units are economic from the perspective of satisfying the NYISO’s reliability requirements. . . . If the reliability needs satisfied by these units were reflected in the capacity market, the units would both clear.”

18. In his affidavit, Dr. Patton uses the term “revenue inadequate” to refer to generating plants that do not receive adequate revenues *under the current market design* to remain in operation. Such units will generally seek to retire, and if the RTO finds that the units are needed for reliability in the near term, an RMR arrangement will typically result. Under Dr. Patton’s terminology, the RMR units, while *revenue inadequate* under the current market design, are nevertheless “economic”, that is, *they are not “uneconomic”*, because they are needed for reliability, at least in the near term. As the IPPNY Order notes (quoted above), under a better market design that reflected all reliability needs of the system, the needed RMR units would receive adequate revenue, and it would be clear that they are economic. Under an imperfect market design, the plants, while needed for reliability and, therefore, economic, are revenue inadequate, and the RMR arrangement is the short-term measure that corrects the shortcoming in the market design and makes the plants revenue adequate. As Dr. Patton summarizes (Patton Affidavit at 26):

26. The reason these units should clear and the resulting effects on NYISO’s capacity markets considered efficient and reasonable by the Commission is that the units are

⁸ Answer of the New York Independent System Operator, Inc., Docket No. EL13-62-000, May 30, 2013.

economic from the perspective of satisfying the NYISO's reliability requirements as described above.

19. Dr. Patton further explains that while a capacity market offer price consistent with a resource's going-forward cost ("GFC") is rational and competitive, in the case of RMR units, the revenues from the RMR agreement ("RSSA" revenues, in the New York context) should be reflected (just as energy and ancillary services net revenues reduce the GFC). This results in a *de minimus* GFC (PP 30-32). He concludes (P 32), "Therefore, requiring that the resources be offered at a *de minimus* offer level is nothing more than a requirement that they be offered competitively."

The Commission agreed with this logic in the IPPNY Order, stating (P 66, citations omitted):

We agree with the New York Commission that, when RSSA revenues are taken into consideration, the [RMR] units' going-forward costs would likely be low. Because [the RMR units] are needed for reliability and would clear a capacity market that also reflected local reliability needs, RSSA revenues received by these resources reflect the value of services provided by these resources to customers. In calculating the going-forward costs of these two resources, it is reasonable to deduct their RSSA revenues, because the revenues do not overstate the value provided by the resources to customers.

20. The most common circumstance that leads to an RMR arrangement is a generating unit located in a load pocket that is needed for local reliability, but the load pocket is not modeled in the capacity market. The short-term solution is the RMR arrangement, and the longer-term solution is either transmission enhancements that eliminate the load pocket, or modeling the load pocket as a separate zone, potentially with a separate price, in the capacity market. However, the principle applies more broadly to reliability needs not addressed by the current market design. Dr. Patton also stated the applicable principle in a more general way at P 22:

22. If the planning need being satisfied by the [RMR units] were fully specified in the capacity market, these units would both clear and the price at their locations would generate revenue sufficient to keep them in operation if they were the lowest-cost means to satisfy the needs – hence, they would be revenue adequate and economic.

21. In the case of Mystic 8 & 9, ISO-NE’s “planning need” has to do with fuel security, not local capacity. As with some local capacity needs, this fuel security need is not presently captured in the ISO-NE markets. ISO-NE has identified that Mystic 8 & 9 are needed to maintain reliability, so they are, therefore, economic (under Dr. Patton’s use of the term, which the Commission has adopted), while revenue inadequate. The proposed RMR arrangement, applicable for two capacity commitment periods, provides the revenue needed by the resources, and results in their going-forward costs becoming *de minimus*. Therefore, it is appropriate for Mystic 8 & 9 to offer into FCAs 13 and 14 as price takers. The Commission’s policy in the IPPNY Order is correct, and is applicable here.

22. The Complaint asserts (p. 31) that the Commission’s policy in the IPPNY Order is not applicable for “a number of reasons”, providing five reasons.

23. First, the Complaint correctly notes that the Commission’s policy applies to RMR arrangements that are short-term in nature, but then incorrectly argues that the “Mystic cost-of-service agreement is more akin to the type of long-term agreement that the Commission expressed concern about in IPPNY.” The Mystic RMR agreement is for two years, and ISO-NE is working with stakeholders to develop a market-based solution to the region’s fuel security issues.⁹

24. Second, the Complaint claims that the Mystic units would harm the ISO-NE markets, and asserts (p. 33) that one of the justifications for the Commission’s policy in the IPPNY

⁹ See, for instance, Waiver Filing at 34.

Order was that IPPNY had failed to demonstrate that allowing the resources to offer as price takers “would harm the NYISO Markets” (citing to the IPPNY Order, P 65). This misrepresents the Commission’s finding; the relevant passage is as follows:

While IPPNY would have the Commission direct NYISO to change its existing mitigation rules in the capacity market, it has not demonstrated harm to the market in its original Complaint *that justifies excluding the Cayuga or Dunkirk units* or conduct that is inconsistent with competitive bidding behavior. [emphasis added]

25. That is, the Commission’s policy recognizes and accepts that there can be some price impact as a result of RMR resources during the limited period the RMR arrangement is in effect. But, as noted above, the Commission views the treatment of these resources as price takers as economic.

26. Third, the Complaint notes that the planning need here is fuel security, which is different from the local resource adequacy need in the New York proceeding, and asserts as follows:

In this case, however, the Mystic Units are not being retained to maintain resource adequacy, but to address a “fuel security” need that has not yet been defined and that was never intended to be reflected in the capacity requirement or demand curves in the ISO-NE Forward Capacity Market. Thus, in contrast to IPPNY, allowing the Mystic Units to participate in the Forward Capacity Auctions as price-takers cannot be viewed as an administrative substitute for what would have happened if the ISO-NE Forward Capacity Market had been modeled in a manner that appropriately modeled applicable constraints.

27. This fails to recognize the underlying rationale for the Commission’s policy, which has to do with planning needs that are not captured by the current market design. The proposed Mystic 8 & 9 cost-of-service agreement is indeed an “administrative substitute” for market design

changes that will value fuel security and result in market revenues for units that provide fuel security. Market design changes to value fuel security may be within the capacity market (similar to transmission constraints), or may be outside of the capacity market (and result in revenues that will offset going forward costs, and lower capacity market offer prices). The current market design acquires resource adequacy but not fuel security.

28. Fourth, the Complaint asserts that there is “no need to sacrifice price formation principles in this case to maintain reliability” because the Complaint has proposed a mechanism that would allow the RMR units to participate in the markets. The Complaint’s proposal, which still results in consumers “paying twice” for capacity, is discussed in the next section of this affidavit.

29. Fifth and finally, the Complaint simply asks that if the Complaint is denied based on the Commission’s current policy as enunciated in the IPPNY Order, that the Commission grant rehearing of that order and move toward changing its policy. This is of course not a reason to decline to apply the Commission’s policy to this case.

30. Dr. Sotkiewicz asserts (Sotkiewicz Affidavit, pp. 15-22) that allowing the RMR units to offer into the FCAs as price takers undermines the “first principles” of capacity markets identified in a recent Commission order.¹⁰ However, Dr. Sotkiewicz’s discussion makes it clear that he considers the RMR units “high cost” (P 42), “above-market” (P 46), and “out-of-market” (P 37), and their offers “non-competitive” (P 36). That is, his analysis pertains not to economic, needed resources that are revenue inadequate in the current markets and must be retained for reliability reasons, but to uneconomic resources that are only remaining in operation due to some

¹⁰ ISO New England Inc., 162 FERC ¶ 61,205 (2018) at P 21 (“CASPR Order”).

sort of subsidy. As explained in the previous section, Commission policy is that RMR units can be economic, and are only revenue inadequate because the planning needs they satisfy are not addressed in the current markets. Therefore, his discussion is inapplicable to the case at hand.

31. In particular, Dr. Sotkiewicz suggests (P 46) that allowing fuel-security RMR units to offer as price takers interferes with the third principle identified in the CASPR Order, “selecting the least cost mix of resources that possess the attributes necessary to maintain reliability.” However, his discussion drops the “attributes necessary to maintain reliability” part of the principle. Since the fuel-security RMR units are required for reliability, they certainly belong in the least cost mix of resources.

IV. Evaluation of the Proposed Relief

32. The Complaint (pp. 19-23) and Sotkiewicz Affidavit (PP 29-34) propose a “solution” and allege multiple benefits to their proposal. However, the proposal is only slightly different from what the Commission has rejected in the past. The fundamental element of NEPGA’s proposal is that the RMR units would be offered into FCAs 13 and 14 at their Retirement De-List bids, as mitigated.¹¹ This is, of course, contrary to Commission policy, and would, of course, very likely result in Mystic 8 & 9 not clearing and not receiving CSOs. Under the sloped capacity demand curves, some other capacity, perhaps new entry, likely would clear instead, resulting in what the Commission has described as consumers “paying twice” for capacity.¹² To the extent other resources are not available or very high cost, very little other capacity might clear

¹¹ Complaint, p. 5.

¹² IPPNY Order, P. 45; see also New York Independent System Operator, Inc., 155 FERC ¶ 61,076, Order on Compliance and Rehearing, Docket Nos. ER16-120-000 and EL15-37-001 (2016) P 82.

as a result of the high offer prices for the Mystic units, and the FCA clearing price would spike to high levels. To the extent other existing or new resources do clear as a result of the imposed offer prices that would not otherwise have cleared, there is of course no guarantee that these other resources would be fuel secure since fuel security in general increases cost. Thus, the FCAs could well clear a mix of resources that fails to meet ISO-NE's identified reliability needs, and could exacerbate the fuel security problem.

33. The other element of the NEPGA proposal is to have the RMR units offered into the subsequent Annual Reconfiguration Auctions ("ARAs") for these capacity commitment periods (one-third into each of the three auctions). Assuming the capacity clears, the RMR units would then have CSOs for the capacity commitment periods, and might earn non-zero prices that would offset the RMR costs.

34. This element of the proposal does not offset the harm from removing the RMR units from the FCA, and introduces additional problems. As Dr. Sotkiewicz recognizes (P 33), pushing this capacity into the ARA, without any matching demand, could result in the ARA clearing at a very low or even zero price, in which case there is no offset to the RMR costs. It would also distort these auctions and undermine their purpose of allowing market participants to adjust their capacity commitments. Some market participants would also likely adjust their offer strategies into the FCAs in anticipation of the ARAs likely failing to offer reasonable prices for capacity.

35. The Complaint (p. 19, p. 22) and Sotkiewicz Affidavit (P 30) suggest that this proposal is somehow similar to the CASPR proposal recently approved by the Commission. However, this is not the case. Under CASPR, minimum offer prices are imposed on state-sponsored resources and they likely fail to clear in the FCA. The state-sponsored resources may

obtain a CSO in a substitution auction if there are retiring resources that cleared in the FCA. Under the NEPGA proposal, existing resources that are required for reliability (Mystic 8 & 9) are removed from the FCA, very likely resulting in some other resource clearing in their place and resulting in duplicative capacity.

V. Evaluation of Estimates of Price Suppression and Displacement

36. The Sotkiewicz Affidavit provides estimates of what it characterizes as the price impacts of allowing the Mystic 8 & 9 units to offer as price takers into FCA 13 and 14 (PP 10-28). However, all Dr. Sotkiewicz has done is to shift an assumed supply curve by the capacity of these units, and compare the clearing prices before and after the shift. He uses two different supply curves one relatively gently sloped and a steeper one. Based on this simple calculation, he claims (P 14) to have identified upper and lower bounds for the price impact and quantity displacement that would result in the auctions as a result of Mystic 8 & 9 being offered as price takers as opposed to effectively being removed from the auctions.

37. However, this simplistic analysis is flawed in that it completely ignores how the market would likely respond to the inclusion (or removal) of these resources from the market. It is quite possible that if the Commission's policy were to change such that Mystic 8 & 9 were effectively removed from FCA 13 and 14, market participants would bring forth replacement capacity into these auctions. Competitive new resources frequently offer at low prices, so it is quite possible that an equivalent quantity of new generation would clear in place of Mystic 8 & 9. If this occurs (MW for MW replacement), then the price impact of removing them would be exactly zero (or, viewing the example the other direction, the price impact of *including* them in the auctions, so they clear and the replacement capacity does not, would be zero). Thus, the "lower

bound” on price impact is clearly zero, if not negative (negative occurs if the replacement resource is larger than Mystic 8 & 9).

38. And again, there would be no guarantee that the replacement resources would be fuel secure. The replacement resources might in fact not be fuel secure, and might prove to be uneconomic in the future when the ISO-NE market design is modified to recognize the value of fuel security.

39. Similarly, Dr. Sotkiewicz’s estimated bounds for displacement ignore market adjustments, and are arbitrary. The market might replace all of the capacity, or none of it, in FCA 13 or in FCA 14.

40. This concludes my affidavit.

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

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

Docket No. EL18-154-000

I, James F. Wilson, being first duly sworn, certify that the Affidavit in Support of the Protest of the New England States Committee On Electricity was prepared by me or under my supervision; and that the statements and facts set forth therein are true and correct to the best of my knowledge, information, and belief.


James F. Wilson

Subscribed and sworn before me, a Notary Public in and for the State of Maryland
this 5th day of JUNE, 2018.





Notary Public
My Commission expires: 10/14/20

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SUMMARY

James F. Wilson is an economist with over 30 years of consulting experience, primarily in the electric power and natural gas industries. Many of his assignments have pertained to the economic and policy issues arising from the interplay of competition and regulation in these industries, including restructuring policies, market design, market analysis and market power. Other recent engagements have involved resource adequacy and capacity markets, contract litigation and damages, forecasting and market evaluation, pipeline rate cases and evaluating allegations of market manipulation. Mr. Wilson has been involved in electricity restructuring and wholesale market design for over twenty years in California, PJM, New England, Russia and other regions. He also spent five years in Russia in the early 1990s advising on the reform, restructuring and development of the Russian electricity and natural gas industries.

Mr. Wilson has submitted affidavits and testified in Federal Energy Regulatory Commission and state regulatory proceedings. His papers have appeared in the *Energy Journal*, *Electricity Journal*, *Public Utilities Fortnightly* and other publications, and he often presents at industry conferences.

Prior to founding Wilson Energy Economics, Mr. Wilson was a Principal at LECG, LLC. He has also worked for ICF Resources, Decision Focus Inc., and as an independent consultant.

EDUCATION

MS, Engineering-Economic Systems, Stanford University, 1982
 BA, Mathematics, Oberlin College, 1977

RECENT ENGAGEMENTS

- Evaluated the potential impact of an electricity generation operating reserve demand curve on a wholesale electricity market with a capacity construct.
- Developed wholesale capacity market enhancements to accommodate seasonal resources and resource adequacy requirements.
- Evaluation of wholesale electricity market design enhancements to accommodate state initiatives to promote state environmental and other policy objectives.
- Evaluation of proposals for natural gas distribution system expansions.
- Various consulting assignments on wholesale electric capacity market design issues in PJM, New England, the Midwest, Texas, and California.
- Cost-benefit analysis of a new natural gas pipeline.
- Evaluation of the impacts of demand response on electric generation capacity mix and emissions.
- Panelist on a FERC technical conference on capacity markets.
- Affidavit on the potential for market power over natural gas storage.
- Executive briefing on wind integration and linkages to short-term and longer-term resource adequacy approaches.

- Affidavit on the impact of a centralized capacity market on the potential benefits of participation in a Regional Transmission Organization (RTO).
- Participated in a panel teleseminar on resource adequacy policy and modeling.
- Affidavit on opt-out rules for centralized capacity markets.
- Affidavits on minimum offer price rules for RTO centralized capacity markets.
- Evaluated electric utility avoided cost in a tax dispute.
- Advised on pricing approaches for RTO backstop short-term capacity procurement.
- Affidavit evaluating the potential impact on reliability of demand response products limited in the number or duration of calls.
- Evaluated changing patterns of natural gas production and pipeline flows, developed approaches for pipeline tolls and cost recovery.
- Evaluated an electricity peak load forecasting methodology and forecast; evaluated regional transmission needs for resource adequacy.
- Participated on a panel teleseminar on natural gas price forecasting.
- Affidavit evaluating a shortage pricing mechanism and recommending changes.
- Testimony in support of proposed changes to a forward capacity market mechanism.
- Reviewed and critiqued an analysis of the economic impacts of restrictions on oil and gas development.
- Advised on the development of metrics for evaluating the performance of Regional Transmission Organizations and their markets.
- Prepared affidavit on the efficiency benefits of excess capacity sales in readjustment auctions for installed capacity.
- Prepared affidavit on the potential impacts of long lead time and multiple uncertainties on clearing prices in an auction for standard offer electric generation service.

EARLIER PROFESSIONAL EXPERIENCE

LECG, LCC, Washington, DC 1998–2009.

Principal

- Reviewed and commented on an analysis of the target installed capacity reserve margin for the Mid Atlantic region; recommended improvements to the analysis and assumptions.
- Evaluated an electric generating capacity mechanism and the price levels to support adequate capacity; recommended changes to improve efficiency.
- Analyzed and critiqued the methodology and assumptions used in preparation of a long run electricity peak load forecast.
- Evaluated results of an electric generating capacity incentive mechanism and critiqued the mechanism's design; prepared a detailed report. Evaluated the impacts of the mechanism's flaws on prices and costs and prepared testimony in support of a formal complaint.
- Analyzed impacts and potential damages of natural gas migration from a storage field.
- Evaluated allegations of manipulation of natural gas prices and assessed the potential impacts of natural gas trading strategies.
- Prepared affidavit evaluating a pipeline's application for market-based rates for interruptible transportation and the potential for market power.
- Prepared testimony on natural gas industry contracting practices and damages in a contract dispute.
- Prepared affidavits on design issues for an electric generating capacity mechanism for an eastern US regional transmission organization; participated in extensive settlement discussions.
- Prepared testimony on the appropriateness of zonal rates for a natural gas pipeline.
- Evaluated market power issues raised by a possible gas-electric merger.
- Prepared testimony on whether rates for a pipeline extension should be rolled-in or incremental under Federal Energy Regulatory Commission ("FERC") policy.

- Prepared an expert report on damages in a natural gas contract dispute.
- Prepared testimony regarding the incentive impacts of a ratemaking method for natural gas pipelines.
- Prepared testimony evaluating natural gas procurement incentive mechanisms.
- Analyzed the need for and value of additional natural gas storage in the southwestern US.
- Evaluated market issues in the restructured Russian electric power market, including the need to introduce financial transmission rights, and policies for evaluating mergers.
- Affidavit on market conditions in western US natural gas markets and the potential for a new merchant gas storage facility to exercise market power.
- Testimony on the advantages of a system of firm, tradable natural gas transmission and storage rights, and the performance of a market structure based on such policies.
- Testimony on the potential benefits of new independent natural gas storage and policies for providing transmission access to storage users.
- Testimony on the causes of California natural gas price increases during 2000-2001 and the possible exercise of market power to raise natural gas prices at the California border.
- Advised a major US utility with regard to the Federal Energy Regulatory Commission's proposed Standard Market Design and its potential impacts on the company.
- Reviewed and critiqued draft legislation and detailed market rules for reforming the Russian electricity industry, for a major investor in the sector.
- Analyzed the causes of high prices in California wholesale electric markets during 2000 and developed recommendations, including alternatives for price mitigation. Testimony on price mitigation measures.
- Summarized and critiqued wholesale and retail restructuring and competition policies for electric power and natural gas in select US states, for a Pacific Rim government contemplating energy reforms.
- Presented testimony regarding divestiture of hydroelectric generation assets, potential market power issues, and mitigation approaches to the California Public Utilities Commission.
- Reviewed the reasonableness of an electric utility's wholesale power purchases and sales in a restructured power market during a period of high prices.
- Presented an expert report on failure to perform and liquidated damages in a natural gas contract dispute.
- Presented a workshop on Market Monitoring to a group of electric utilities in the process of forming an RTO.
- Authored a report on the screening approaches used by market monitors for assessing exercise of market power, material impacts of conduct, and workable competition.
- Developed recommendations for mitigating locational market power, as part of a package of congestion management reforms.
- Provided analysis in support of a transmission owner involved in a contract dispute with generators providing services related to local grid reliability.
- Authored a report on the role of regional transmission organizations in market monitoring.
- Prepared market power analyses in support of electric generators' applications to FERC for market-based rates for energy and ancillary services.
- Analyzed western electricity markets and the potential market power of a large producer under various asset acquisition or divestiture strategies.
- Testified before a state commission regarding the potential benefits of retail electric competition and issues that must be addressed to implement it.
- Prepared a market power analysis in support of an acquisition of generating capacity in the New England market.
- Advised a California utility regarding reform strategies for the California natural gas industry, addressing market power issues and policy options for providing system balancing services.

ICF RESOURCES, INC., Fairfax, VA, 1997–1998.

Project Manager

- Reviewed, critiqued and submitted testimony on a New Jersey electric utility's restructuring proposal, as part of a management audit for the state regulatory commission.
- Assisted a group of US utilities in developing a proposal to form a regional Independent System Operator (ISO).
- Researched and reported on the emergence of Independent System Operators and their role in reliability, for the Department of Energy.
- Provided analytical support to the Secretary of Energy's Task Force on Electric System Reliability on various topics, including ISOs. Wrote white papers on the potential role of markets in ensuring reliability.
- Recommended near-term strategies for addressing the potential stranded costs of non-utility generator contracts for an eastern utility; analyzed and evaluated the potential benefits of various contract modifications, including buyout and buydown options; designed a reverse auction approach to stimulating competition in the renegotiation process.
- Designed an auction process for divestiture of a Northeastern electric utility's generation assets and entitlements (power purchase agreements).
- Participated in several projects involving analysis of regional power markets and valuation of existing or proposed generation assets.

IRIS MARKET ENVIRONMENT PROJECT, 1994–1996.

Project Director, Moscow, Russia

Established and led a policy analysis group advising the Russian Federal Energy Commission and Ministry of Economy on economic policies for the electric power, natural gas, oil pipeline, telecommunications, and rail transport industries (*the Program on Natural Monopolies*, a project of the IRIS Center of the University of Maryland Department of Economics, funded by USAID):

- Advised on industry reforms and the establishment of federal regulatory institutions.
- Advised the Russian Federal Energy Commission on electricity restructuring, development of a competitive wholesale market for electric power, tariff improvements, and other issues of electric power and natural gas industry reform.
- Developed policy conditions for the IMF's \$10 billion Extended Funding Facility.
- Performed industry diagnostic analyses with detailed policy recommendations for electric power (1994), natural gas, rail transport and telecommunications (1995), oil transport (1996).

Independent Consultant stationed in Moscow, Russia, 1991–1996

Projects for the WORLD BANK, 1992-1996:

- Bank Strategy for the Russian Electricity Sector. Developed a policy paper outlining current industry problems and necessary policies, and recommending World Bank strategy.
- Russian Electric Power Industry Restructuring. Participated in work to develop recommendations to the Russian Government on electric power industry restructuring.
- Russian Electric Power Sector Update. Led project to review developments in sector restructuring, regulation, demand, supply, tariffs, and investment.
- Russian Coal Industry Restructuring. Analyzed Russian and export coal markets and developed forecasts of future demand for Russian coal.
- World Bank/IEA Electricity Options Study for the G-7. Analyzed mid- and long-term electric power demand and efficiency prospects and developed forecasts.
- Russian Energy Pricing and Taxation. Developed recommendations for liberalizing energy markets, eliminating subsidies and restructuring tariffs for all energy resources.

Other consulting assignments in Russia, 1991–1994:

- Advised on projects pertaining to Russian energy policy and the transition to a market economy in the energy industries, for the Institute for Energy Research of the Russian Academy of Sciences.
- Presented seminars on the structure, economics, planning, and regulation of the energy and electric power industries in the US, for various Russian clients.

DECISION FOCUS INC., Mountain View, CA, 1983–1992

Senior Associate, 1985-1992.

- For the Electric Power Research Institute, led projects to develop decision-analytic methodologies and models for evaluating long term fuel and electric power contracting and procurement strategies. Applied the methodologies and models in numerous case studies, and presented several workshops and training sessions on the approaches.
- Analyzed long-term and short-term natural gas supply decisions for a large California gas distribution company following gas industry unbundling and restructuring.
- Analyzed long term coal and rail alternatives for a midwest electric utility.
- Evaluated bulk power purchase alternatives and strategies for a New Jersey electric utility.
- Performed a financial and economic analysis of a proposed hydroelectric project.
- For a natural gas pipeline company serving the Northeastern US, forecasted long-term natural gas supply and transportation volumes. Developed a forecasting system for staff use.
- Analyzed potential benefits of diversification of suppliers for a natural gas pipeline company.
- Evaluated uranium contracting strategies for an electric utility.
- Analyzed telecommunications services markets under deregulation, developed and implemented a pricing strategy model. Evaluated potential responses of residential and business customers to changes in the client's and competitors' telecommunications services and prices.
- Analyzed coal contract terms and supplier diversification strategies for an eastern electric utility.
- Analyzed oil and natural gas contracting strategies for an electric utility.

TESTIMONY AND AFFIDAVITS

PJM Interconnection, L.L.C., FERC Docket No. ER18-1314 (Capacity repricing or MOPR-Ex), Affidavit in Support of the Protests of DC-MD-NJ Consumer Coalition, Joint Consumer Advocates, and Clean Energy Advocates, May 7, 2018.

In the Matter of the Application of DTE Electric Company for Authority to Implement a Power Supply Cost Recovery Plan in its Rate Schedules for 2018 Metered Jurisdictional Sales of Electricity, Michigan Public Service Commission Case No. U-18403, Direct Testimony on behalf of Michigan Environmental Council and Sierra Club, April 20, 2018.

Virginia Electric and Power Company's Integrated Resource Plan filing, Virginia State Corporation Commission Case No. PUE-2017-00051, Direct Testimony on behalf of Environmental Respondents, August 11, 2017; testimony at hearings September 26, 2017.

Ohio House of Representatives Public Utilities Committee hearing on House Bill 178 (Zero Emission Nuclear Resource legislation), Opponent Testimony on Behalf of Natural Resources Defense Council, May 15, 2017.

In the Matter of the Application of Atlantic Coast Pipeline, Federal Energy Regulatory Commission Docket No. CP15-554, Evaluating Market Need for the Atlantic Coast Pipeline, Attachment 2 to the comments of Shenandoah Valley Network *et al*, April 6, 2017.

In the Matter of the Application of DTE Electric Company for Authority to Implement a Power Supply Cost Recovery Plan in its Rate Schedules for 2017 Metered Jurisdictional Sales of Electricity, Michigan Public Service Commission Case No. U-18143, Direct Testimony on behalf of Michigan Environmental Council and Sierra Club, March 22, 2017.

In the Matter of the Petition of Washington Gas Light Company for Approval of Revised Tariff Provisions to Facilitate Access to Natural Gas in the Company's Maryland Franchise Area That Are

Currently Without Natural Gas Service, Maryland Public Service Commission Case No. 9433, Direct Testimony on Behalf of the Mid-Atlantic Propane Gas Association and the Mid-Atlantic Petroleum Distributors Association, Inc., March 1, 2017; testimony at hearings, May 1, 2017.

In the Matter of Integrated Resource Plans and Related 2016 REPS Compliance Plans, North Carolina Utilities Commission Docket No. E-11 Sub 147, Review and Evaluation of the Peak Load Forecasts and Reserve Margin Determinations for the Duke Energy Carolinas and Duke Energy Progress 2016 Integrated Resource Plans, Attachments A and B to the comments of the Natural Resources Defense Council, Southern Alliance for Clean Energy, and the Sierra Club, February 17, 2017.

In the Matter of the Tariff Revisions Designated TA285-4 filed by ENSTAR Natural Gas Company, a Division of SEMCO Energy, Inc., Regulatory Commission of Alaska Case No. U-16-066, Testimony on Behalf of Matanuska Electric Association, Inc., February 7, 2017, testimony at hearings, June 21, 2017.

PJM Interconnection, L.L.C., FERC Docket No. ER17-367 (seasonal capacity), Prepared Testimony on Behalf of Advanced Energy Management Alliance, Environmental Law & Policy Center, Natural Resources Defense Council, Rockland Electric Company and Sierra Club, December 8, 2016; Declaration in support of Protest of Response to Deficiency Letter, February 13, 2017.

Natural Resources Defense Council, Sierra Club, and Union of Concerned Scientists v. Federal Energy Regulatory Commission, U.S. District Court of Appeals for the D.C. Circuit Case No. 16-1236 (Capacity Performance), Declaration, September 23, 2016.

Mountaineer Gas Company Infrastructure Replacement and Expansion Program Filing for 2016, West Virginia Public Service Commission Case No. 15-1256-G-390P, and Mountaineer Gas Company Infrastructure Replacement and Expansion Program Filing for 2017, West Virginia Public Service Commission Case No. 16-0922-G-390P, Direct Testimony on behalf of the West Virginia Propane Gas Association, September 9, 2016.

Application of Chesapeake Utilities Corporation for a General Increase in its Natural Gas Rates and for Approval of Certain Other Changes to its Natural Gas Tariff, Delaware P.S.C. Docket No. 15-1734, Direct Testimony on behalf of the Delaware Association Of Alternative Energy Providers, Inc., August 24, 2016.

Virginia Electric and Power Company's Integrated Resource Plan filing, Virginia State Corporation Commission Case No. PUE-2016-00049, Direct Testimony on behalf of Environmental Respondents, August 17, 2016; testimony at hearings October 5, 2016.

In the Matter of the Application of DTE Electric Company for Authority to Implement a Power Supply Cost Recovery Plan in its Rate Schedules for 2016 Metered Jurisdictional Sales of Electricity, Michigan Public Service Commission Case No. U-17920, Direct Testimony on behalf of Michigan Environmental Council and Sierra Club, March 14, 2016.

In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider, Public Utilities Commission of Ohio Case No. 14-1693-EL-RDR: Direct Testimony on Behalf of the Office of the Ohio Consumers' Counsel, September 11, 2015; deposition, September 30, 2015; supplemental deposition, October 16, 2015; testimony at hearings, October 21, 2015; supplemental testimony December 28, 2015; second supplemental deposition, December 30, 2015; testimony at hearings January 8, 2016.

Indicated Market Participants v. PJM Interconnection, L.L.C., FERC Docket No. EL15-88 (Capacity Performance transition auctions), Affidavit on behalf of the Joint Consumer Representatives and Interested State Commissions, August 17, 2015.

ISO New England Inc. and New England Power Pool Participants Committee, FERC Docket No. ER15-2208 (Winter Reliability Program), Testimony on Behalf of the New England States Committee on Electricity, August 5, 2015.

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In the Matter of the Tariff Revisions Filed by ENSTAR Natural Gas Company, a Division of SEMCO Energy, Inc., Regulatory Commission of Alaska Case No. U-14-111, Testimony on Behalf of Matanuska Electric Association, Inc., May 13, 2015.

In the Matter of the Application of Ohio Edison Company et al for Authority to Provide for a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Electric Security Plan, Public Utilities Commission of Ohio Case No. 14-1297-EL-SSO: Direct Testimony on Behalf of the Office of the Ohio Consumers' Counsel and Northeast Ohio Public Energy Council, December 22, 2014; deposition, February 10, 2015; supplemental testimony May 11, 2015; second deposition May 26, 2015; testimony at hearings, October 2, 2015; second supplemental testimony December 30, 2015; third deposition January 8, 2016; testimony at hearings January 19, 2016; rehearing direct testimony June 22, 2016; fourth deposition July 5, 2016; testimony at hearings July 14, 2016.

PJM Interconnection, L.L.C., FERC Docket No. ER14-2940 (RPM Triennial Review), Affidavit in Support of the Protest of the PJM Load Group, October 16, 2014.

In the Matter of the Application of Duke Energy Ohio for Authority to Establish a Standard Service Offer in the Form of an Electric Security Plan, Public Utilities Commission of Ohio Case No. 14-841-EL-SSO: Direct Testimony on Behalf of the Office of the Ohio Consumers' Counsel, September 26, 2014; deposition, October 6, 2014; testimony at hearings, November 5, 2014.

In the Matter of the Application of Ohio Power Company for Authority to Establish a Standard Service Offer in the Form of an Electric Security Plan, Public Utilities Commission of Ohio Case No. 13-2385-EL-SSO: Direct Testimony on Behalf of the Office of the Ohio Consumers' Counsel, May 6, 2014; deposition, May 29, 2014; testimony at hearings, June 16, 2014.

PJM Interconnection, L.L.C., FERC Docket No. ER14-504 (clearing of Demand Response in RPM), Affidavit in Support of the Protest of the Joint Consumer Advocates and Public Interest Organizations, December 20, 2013.

New England Power Generators Association, Inc. v. ISO New England Inc., FERC Docket No. EL14-7 (administrative capacity pricing), Testimony in Support of the Protest of the New England States Committee on Electricity, November 27, 2013.

Midwest Independent Transmission System Operator, Inc., FERC Docket No. ER11-4081 (minimum offer price rule), Affidavit In Support of Brief of the Midwest TDUs, October 11, 2013.

ANR Storage Company, FERC Docket No. RP12-479 (storage market-based rates), Prepared Answering Testimony on behalf of the Joint Intervenor Group, April 2, 2013; Prepared Cross-answering Testimony, May 15, 2013; testimony at hearings, September 4, 2013.

In the Matter of the Application of The Dayton Power and Light Company for Approval of its Market Rate Offer, Public Utilities Commission of Ohio Case No. 12-426-EL-SSO: Direct Testimony on Behalf of the Office of the Ohio Consumers' Counsel, March 5, 2013; deposition, March 11, 2013.

PJM Interconnection, L.L.C., FERC Docket No. ER13-535 (minimum offer price rule), Affidavit in Support of the Protest and Comments of the Joint Consumer Advocates, December 28, 2012.

In the Matter of the Application of Ohio Edison Company, et al for Authority to Provide for a Standard Service Offer in the Form of an Electric Security Plan, Public Utilities Commission of Ohio Case No. 12-1230-EL-SSO: Direct Testimony on Behalf of the Office of the Ohio Consumers' Counsel, May 21, 2012; deposition, May 30, 2012; testimony at hearings, June 5, 2012.

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People of the State of Illinois *ex rel.* Leon A. Greenblatt, III v Commonwealth Edison Company, Circuit Court of Cook County, Illinois, deposition, September 22, 2011; interrogatory, Feb. 22, 2011.

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Operator, Inc., Missouri PSC Case No. EO-2011-0128, Testimony in hearings, February 9, 2012; Rebuttal Testimony and Response to Commission Questions On Behalf Of The Missouri Joint Municipal Electric Utility Commission, September 14, 2011.

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PJM Interconnection, L.L.C., FERC Docket No. ER11-2288 (demand response "saturation"), Affidavit in Support of Protest and Comments of the Joint Consumer Advocates, December 23, 2010.

North American Electric Reliability Corporation, FERC Docket No. RM10-10, Comments on Proposed Reliability Standard BAL-502-RFC-02: Planning Resource Adequacy Analysis, Assessment and Documentation, December 23, 2010.

In the Matter of the Reliability Pricing Model and the 2013/2014 Delivery Year Base Residual Auction Results, Maryland Public Service Commission Administrative Docket PC 22, Comments and Responses to Questions On Behalf of Southern Maryland Electric Cooperative, October 15, 2010.

PJM Interconnection, L.L.C., FERC Docket No. ER09-1063-004 (PJM compliance filing on pricing during operating reserve shortages): Affidavit In Support of Comments and Protest of the Pennsylvania Public Utility Commission, July 30, 2010.

ISO New England, Inc. and New England Power Pool, FERC Docket No. ER10-787 (minimum offer price rules): Direct Testimony On Behalf Of The Connecticut Department of Public Utility Control, March 30, 2010; Direct Testimony in Support of First Brief of the Joint Filing Supporters, July 1, 2010; Supplemental Testimony in Support of Second Brief of the Joint Filing Supporters, September 1, 2010.

PJM Interconnection, L.L.C., FERC Docket No. ER09-412-006 (RPM incremental auctions): Affidavit In Support of Protest of Indicated Consumer Interests, January 19, 2010.

In the Matter of the Application of Ohio Edison Company, et al for Approval of a Market Rate Offer to Conduct a Competitive Bidding Process for Standard Service Offer Electric Generation Supply, Public Utilities Commission of Ohio Case No. 09-906-EL-SSO: Direct Testimony on Behalf of the Office of the Ohio Consumers' Counsel, December 7, 2009; deposition, December 10, 2009, testimony at hearings, December 22, 2009.

Application of PATH Allegheny Virginia Transmission Corporation for Certificates of Public Convenience and Necessity to Construct Facilities: 765 kV Transmission Line through Loudon, Frederick and Clarke Counties, Virginia State Corporation Commission Case No. PUE-2009-00043: Direct Testimony on Behalf of Commission Staff, December 8, 2009.

PJM Interconnection, L.L.C., FERC Docket No. ER09-412-000: Affidavit On Proposed Changes to the Reliability Pricing Model On Behalf Of RPM Load Group, January 9, 2009; Reply Affidavit, January 26, 2009.

PJM Interconnection, L.L.C., FERC Docket No. ER09-412-000: Affidavit In Support of the Protest Regarding Load Forecast To Be Used in May 2009 RPM Auction, January 9, 2009.

Maryland Public Service Commission et al v. PJM Interconnection, L.L.C., FERC Docket No. EL08-67-000: Affidavit in Support Complaint of the RPM Buyers, May 30, 2008; Supplemental Affidavit, July 28, 2008.

PJM Interconnection, L.L.C., FERC Docket No. ER08-516: Affidavit On PJM's Proposed Change to RPM Parameters on Behalf of RPM Buyers, March 6, 2008.

PJM Interconnection, L.L.C., Reliability Pricing Model Compliance Filing, FERC Docket Nos. ER05-1410 and EL05-148: Affidavit Addressing RPM Compliance Filing Issues on Behalf of the Public Power Association of New Jersey, October 15, 2007.

TXU Energy Retail Company LP v. Leprino Foods Company, Inc., US District Court for the Northern District of California, Case No. C01-20289: Testimony at trial, November 15-29, 2006; Deposition, April 7, 2006; Expert Report on Behalf of Leprino Foods Company, March 10, 2006.

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PJM Interconnection, L.L.C., Reliability Pricing Model, FERC Docket Nos. ER05-1410 and EL05-148: Supplemental Affidavit on Technical Conference Issues, June 22, 2006; Supplemental Affidavit Addressing Paper Hearing Topics, June 2, 2006; Affidavit on Behalf of the Public Power Association of New Jersey, October 19, 2005.

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Dynegy Marketing and Trade v. Multiut Corporation, US District Court of the Northern District of Illinois, Case. No. 02 C 7446: Deposition, September 1, 2005; Expert Report in response to Defendant's counterclaims, March 21, 2005; Expert Report on damages, October 15, 2004.

Application of Pacific Gas and Electric Company, California Public Utilities Commission proceeding A.04-03-021: Prepared Testimony, Policy for Throughput-Based Backbone Rates, on behalf of Pacific Gas and Electric Company, May 21, 2004.

Gas Market Activities, California Public Utilities Commission Order Instituting Investigation I.02-11-040: Testimony at hearings, July, 2004; Prepared Testimony, Comparison of Incentives Under Gas Procurement Incentive Mechanisms, on behalf of Pacific Gas and Electric Company, December 10, 2003.

Application of Red Lake Gas Storage, L.P., FERC Docket No. CP02-420, Affidavit in support of application for market-based rates for a proposed merchant gas storage facility, March 3, 2003.

Application of Pacific Gas and Electric Company, California Public Utilities Commission proceeding A.01-10-011: Testimony at hearings, April 1-2, 2003; Rebuttal Testimony, March 24, 2003; Prepared Testimony, Performance of the Gas Accord Market Structure, on behalf of Pacific Gas and Electric Company, January 13, 2003.

Application of Wild Goose Storage, Inc., California Public Utilities Commission proceeding A.01-06-029: Testimony at hearings, November, 2001; Prepared testimony regarding policies for backbone expansion and tolls, and potential ratepayer benefits of new storage, on behalf of Pacific Gas and Electric Company, October 24, 2001.

Public Utilities Commission of the State of California v. El Paso Natural Gas Co., FERC Docket No. RP00-241: Testimony at hearings, May-June, 2001; Prepared Testimony on behalf of Pacific Gas and Electric Company, May 8, 2001.

Application of Pacific Gas and Electric Company, California Public Utilities Commission proceeding A.99-09-053: Prepared testimony regarding market power consequences of divestiture of hydroelectric assets, December 5, 2000.

San Diego Gas & Electric Company, *et al*, FERC Docket No. EL00-95: Prepared testimony regarding proposed price mitigation measures on behalf of Pacific Gas and Electric Co., November 22, 2000.

Application of Harbor Cogeneration Company, FERC Docket No. ER99-1248: Affidavit in support of application for market-based rates for energy, capacity and ancillary services, December 1998.

Application of and Complaint of Residential Electric, Incorporated vs. Public Service Company of New Mexico, New Mexico Public Utility Commission Case Nos. 2867 and 2868: Testimony at hearings, November, 1998; Direct Testimony on behalf of Public Service Company of New Mexico on retail access issues, November, 1998.

Management audit of Public Service Electric and Gas' restructuring proposal for the New Jersey Board of Public Utilities: Prepared testimony on reliability and basic generation service, March 1998.

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Reconsidering Resource Adequacy (Part 1): Has the One-Day-in-Ten-Years Criterion Outlived Its Usefulness? Public Utilities Fortnightly, April 2010.

A Hard Look at Incentive Mechanisms for Natural Gas Procurement, with K. Costello, National Regulatory Research Institute Report No. 06-15, November 2006.

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After the Gas Bubble: An Economic Evaluation of the Recent National Petroleum Council Study, with K. Costello and H. Huntington, Energy Journal Vol. 26 No. 2 (2005).

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Restructuring the Electric Power Industry: Past Problems, Future Directions, Natural Resources and Environment, ABA Section of Environment, Energy and Resources, Volume 16 No. 4, Spring, 2002.

Scarcity, Market Power, Price Spikes, and Price Caps, Electricity Journal, November, 2000.

The New York ISO's Market Power Screens, Thresholds, and Mitigation: Why It Is Not A Model For Other Market Monitors, Electricity Journal, August/September 2000.

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Meeting Russia's Electric Power Needs: Uncertainty, Risk and Economic Reform, Financial and Business News, April 1993.

Russian Energy Policy through the Eyes of an American Economist, Energeticheskoye Stroitelstvo, December 1992, p 2.

Fuel Contracting Under Uncertainty, with R. B. Fancher and H. A. Mueller, IEEE Transactions on Power Systems, February, 1986, p. 26-33.

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Seasonal Capacity Technical Conference, Federal Energy Regulatory Commission Docket Nos. EL17-32 and EL17-36, *Pre-Conference Comments* April 11, 2018; panelist, April 24, 2018.

Panel: Demand Response, Organization of PJM States Spring Strategy Meeting, April 9, 2018.

Panel: Energy Price Formation, Organization of PJM States Spring Strategy Meeting, April 9, 2018.

Panel: Regional Reliability Standards: Requirements or Replaceable Relics? Harvard Electricity Policy Group Ninetieth Plenary Session, March 22, 2018.

Panel: Transitioning to 100% Capacity Performance: Implications to Wind, Solar, Hydro and DR; moderator; Infocast's Mid-Atlantic Power Market Summit, October 24, 2017.

Panel: PJM Market Design Proposals Addressing State Public Policy Initiatives; Organization of PJM States, Inc. Annual Meeting, Arlington, VA, October 3, 2017.

Post Technical Conference Comments, State Policies and Wholesale Markets Operated by ISO New England Inc., New York Independent System Operator, Inc., and PJM Interconnection, L.L.C., FERC Docket No. AD17-11, June 22, 2017.

Panel: How Can PJM Integrate Seasonal Resources into its Capacity Market? Organization of PJM States, Inc. Annual Meeting, Columbus Ohio, October 19, 2016.

IMAPP “Two-Tier” FCM Pricing Proposals: Description and Critique, prepared for the New England States Committee on Electricity, October 2016.

“Missing Money” Revisited: Evolution of PJM’s RPM Capacity Construct, report prepared for American Public Power Association, September 2016.

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PJM’s “Capacity Performance” Tariff Changes: Estimated Impact on the Cost of Capacity, prepared for the American Public Power Association, October, 2015.

Panel: Capacity Performance (and Incentive) Reform, EUCI Conference on Capacity Markets: Gauging Their Real Impact on Resource Development & Reliability, August 15, 2015.

Panel on Load Forecasting, Organization of PJM States Spring Strategy Meeting, April 13, 2015.

Panelist for Session 2: Balancing Bulk Power System and Distribution System Reliability in the Eastern Interconnection, Meeting of the Eastern Interconnection States’ Planning Council, December 11, 2014.

Panel: Impact of PJM Capacity Performance Proposal on Demand Response, Mid-Atlantic Distributed Resources Initiative (MADRI) Working Group Meeting #36, December 9, 2014.

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Economics of Planning for Resource Adequacy, NARUC Summer Meetings, Denver, Colorado, July 21, 2013.

The Increasing Need for Flexible Resources: Considerations for Forward Procurement, EUCI Conference on Fast and Flexi-Ramp Resources, Chicago, Illinois, April 23-24, 2013.

Panel on RPM Issues: Long Term Vision and Recommendations for Now, Organization of PJM States, Inc. Spring Strategy Meeting, April 3, 2013.

Comments On: The Economic Ramifications of Resource Adequacy Whitepaper, peer review of whitepaper prepared for EISPC and NARUC, March 24, 2013.

Resource Adequacy: Criteria, Constructs, Emerging Issues, Coal Finance 2013, Institute for Policy Integrity, NYU School of Law, March 19, 2013.

Panel Discussion – Alternative Models and Best Practices in Other Regions, Long-Term Resource Adequacy Summit, California Public Utilities Commission and California ISO, San Francisco, California, February 26, 2013.

Fundamental Capacity Market Design Choices: How Far Forward? How Locational? EUCI Capacity Markets Conference, October 3, 2012.

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Reliability and Economics: Separate Realities? Harvard Electricity Policy Group Sixty-Fifth Plenary Session, December 1, 2011.

National Regulatory Research Institute Teleseminar: The Economics of Resource Adequacy Planning: Should Reserve Margins Be About More Than Keeping the Lights On?, panelist, September 15, 2011.

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National Regulatory Research Institute Teleseminar: Forecasting Natural Gas Prices, panelist, July 28, 2010.

Comments on the NARUC-Initiated Report: Analysis of the Social, Economic and Environmental Effects of Maintaining Oil and Gas Exploration Moratoria On and Beneath Federal Lands (February 15, 2010) submitted to NARUC on June 22, 2010.

Forward Capacity Market CONEfusion, Advanced Workshop in Regulation and Competition, 29th Annual Eastern Conference of the Center for Research in Regulated Industries, Rutgers University, May 21, 2010.

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Approaches to Local Resource Adequacy, presented at Electric Utility Consultants' Smart Capacity Markets Conference, November 9, 2009.

One Day in Ten Years? Resource Adequacy for the Smarter Grid, Advanced Workshop in Regulation and Competition, 28th Annual Eastern Conference of the Center for Research in Regulated Industries, Rutgers University, May 15, 2009.

Resource Adequacy in Restructured Electricity Markets: Initial Results of PJM's Reliability Pricing Model (RPM), Advanced Workshop in Regulation and Competition, 27th Annual Eastern Conference of the Center for Research in Regulated Industries, Rutgers University, May 15, 2008.

Statement at Federal Energy Regulatory Commission technical conference, Capacity Markets in Regions with Organized Electric Markets, Docket No. AD08-4-000, May 7, 2008.

Raising the Stakes on Capacity Incentives: PJM's Reliability Pricing Model (RPM), presentation at the University of California Energy Institute's 13th Annual POWER Research Conference, Berkeley, California, March 21, 2008.

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Comments on GTN's Request for Market-Based Rates for Interruptible Transportation, presentation at technical conference in Federal Energy Regulatory Commission Docket No. RP06-407, September 26-27, 2006 on behalf of Canadian Association of Petroleum Producers.

Comments on Policies to Encourage Natural Gas Infrastructure, and Supplemental Comments on Market-Based Rates Policy For New Natural Gas Storage, State of the Natural Gas Industry Conference, Federal Energy Regulatory Commission Docket No. AD05-14, October 12, 26, 2005.

After the Gas Bubble: A Critique of the Modeling and Policy Evaluation Contained in the National Petroleum Council's 2003 Natural Gas Study, with K. Costello and H. Huntington, presented at the 24th Annual North American Conference of the USAEE/IAEE, July 2004.

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Market Power: Definition, Detection, Mitigation, pre-conference workshop, with Scott Harvey, January 24, 2001.

Market Monitoring in the U.S.: Evolution and Current Issues, presented at the Association of Power Exchanges' APEx 2000 Conference, October 25, 2000.

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PROFESSIONAL ASSOCIATIONS

United States Association for Energy Economics

Natural Gas Roundtable

Energy Bar Association

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