163 FERC ¶ 61,101
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Kevin J. McIntyre, Chairman;
Cheryl A. LaFleur, Neil Chatterjee,
Robert F. Powelson, and Richard Glick.

PJM Interconnection, L.L.C. Docket Nos. ER18-988-000
EL14-48-000

ORDER REJECTING TARIFF REVISIONS AND TERMINATING SECTION 206 PROCEEDING

(Issued May 8, 2018)

1. On March 9, 2018, PJM Interconnection, L.L.C. (PJM), pursuant to section 205 of the Federal Power Act (FPA)[1] and section 35.13 of the Commission's regulations,[2] filed proposed revisions to the PJM Open Access Transmission Tariff (Tariff) and Reliability Assurance Agreement Among Load Serving Entities in the PJM Region (RAA) to, among other things, reform PJM's capacity market Incremental Auctions and PJM's approach to addressing excess capacity (Incremental Auction Proposal). PJM requests a May 8, 2018 effective date for the proposed revisions. As discussed below, we reject the Incremental Auction Proposal and terminate the FPA section 206[3] proceeding in Docket No. EL14-48-000.

[1] 16 U.S.C. § 824d (2012).

[2] 18 C.F.R. § 35.13 (2017).

[3] 16 U.S.C. § 824e (2012).

I. Background

A. Overview of the PJM Capacity Market

2. Under PJM's capacity market construct, the Reliability Pricing Model (RPM), PJM conducts a Base Residual Auction three years in advance of a Delivery Year to procure commitments of identifiable physical resources sufficient to meet reliability requirements and the needs of electricity consumers within the PJM region.[4] PJM also holds three Incremental Auctions, which provide opportunities for Capacity Market Participants to sell available capacity and purchase replacement capacity[5] and for PJM to secure additional commitments of capacity or relieve sellers from prior capacity commitments based on updated reliability requirements.[6] PJM states that the intended purpose of the Incremental Auctions is to permit Capacity Market Sellers that can no longer honor their capacity commitment "due to unforeseen physical circumstances" to avoid a deficiency penalty, while maintaining the Base Residual Auction capacity commitment level.[7]

3. PJM explains that capacity resources must be physically available to either produce energy or reduce energy consumption at peak times or during emergency conditions in response to PJM dispatch. PJM further explains that forward certainty regarding capacity resources' deliverability is critical to ensuring long-term reliability and effective and efficient transmission planning, because RPM and PJM's Regional Transmission Expansion Planning process are tightly integrated.[8]

4. PJM explains that, when the updated Incremental Auction reliability requirement decreases from the reliability requirement used in the Base Residual Auction, the Tariff directs PJM to release this excess capacity commitment through a PJM Sell Offer of a

[4] PJM Transmittal at 2, 5 (citing Tariff, Attachment DD, section 5.4(a)).

[5] The need to purchase replacement capacity may arise for multiple reasons, including, but not limited to, a resource retirement, a resource cancellation or construction delay, a resource derating, an increase in forced outage rate, a decrease in the Nominated Demand Resource Value of a Planned Demand Resource, a delay or cancellation of a Qualifying Transmission Upgrade, or similar occurrences. PJM Transmittal at 6 (citing Tariff, Attachment DD, section 5.4(d)).

[6] PJM Transmittal at 2 (citing Tariff, Attachment DD, section 5.4(c)). PJM conducts the First, Second, and Third Incremental Auctions 20, 10, and three months prior to the start of the Delivery Year, respectively.

[7] *Id.* at 5-6.

[8] *Id.* at 5.

MW quantity equal to the change in reliability requirement, at a price that is based on the updated Variable Resource Requirement (VRR), or capacity demand curve.[9] PJM explains that, historically, the Incremental Auction clearing prices (and cost to procure replacement capacity) have been consistently and significantly lower than the clearing prices of the relevant Base Residual Auctions, largely due to PJM's release of excess capacity commitments in each Incremental Auction at the price based on an updated capacity demand curve.[10]

5. PJM explains further that consistent price differentials between the Base Residual Auctions and Incremental Auctions may have encouraged Capacity Market Sellers with little or no expectation of physical delivery to obtain a capacity supply obligation by clearing in the Base Residual Auction, because they have a high degree of confidence that they can procure replacement capacity in the Incremental Auction at a lower price, resulting in little likelihood of economic loss and a high likelihood for a profit on the price differential.[11] For example, a capacity resource that clears at $100/MW-day in the Base Residual Auction and then buys replacement capacity in the Incremental Auction at $40/MW-day would then receive $60/MW-day without incurring any responsibilities in PJM's capacity market. PJM explains that, while load in PJM receives the proceeds of a release of excess capacity commitments in an Incremental Auction, load continues to pay the original Base Residual Auction commitment at the Base Residual Auction clearing price for the entire annual Delivery Year period.[12] PJM posits that, in these situations, some capacity resources may not physically exist because they had little expectation of actual physical delivery when they were initially offered in the Base Residual Auction.[13] PJM states that its current market rules do not protect against, and may in fact provide an incentive to engage in, speculative behavior. According to PJM, such behavior "defeats the long term resource adequacy objective of the RPM by distorting price signals on the value of capacity."[14]

6. PJM states that high levels of replacement capacity purchases in the Incremental Auctions indicate that some Capacity Market Sellers are submitting Sell Offers that have a heightened degree of uncertainty regarding the fulfillment of the obligation obtained

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[9] *Id.* at 10.

[10] *Id.* at 2, 6, 10-11.

[11] *Id.* at 2, 7-8.

[12] *Id.* at 12-13 (citing Bastian Aff. P 14).

[13] *Id.* at 2-3.

[14] *Id.* at 6.

inthe Base Residual Auction.[15] PJM notes that, among all types of Capacity Market Participants, Demand Resources show the highest average replacement rate, followed by Internal Planned Generation, External Resources, and Existing Generation.[16]

B. PJM's 2014 Proposed Capacity Market Reforms and the Initiation of the Proceeding in Docket No. EL14-48-000

7. On March 10, 2014, PJM submitted proposed tariff revisions that it stated were designed to discourage speculative offers from being submitted in the capacity auctions (2014 Filing).[17] Components of PJM's 2014 Filing included: a sell-back offer floor at the relevant Base Residual Auction's clearing price,[18] establishing a charge on all replacement capacity transactions,[19] eliminating two Incremental Auctions,[20] increasing Capacity Resource Deficiency Charges,[21] requiring planned generation resources to

[15] *See id.* at 8-9 (citing "Analysis of Replacement Capacity for RPM Commitments: June 1, 2007 to June 1, 2016," https://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=14456055). Monitoring Analytics, LLC, the PJM Independent Market Monitor (IMM), filed this report in Docket Nos. EL14-48-000 and ER14-1461-001 on December 30, 2016 (2016 IMM Report).

[16] *Id.* at 8-9.

[17] *Id.* at 3; *see PJM Interconnection, L.L.C.*, 147 FERC ¶ 61,108 (2014) (2014 Order).

[18] *See* 2014 Order, 147 FERC ¶ 61,108 at PP 28-29. This part of PJM's 2014 proposal was identical to a component of the instant Incremental Auction Proposal discussed below—PJM's release of excess capacity commitments via a PJM Incremental Sell Offer at a price equal to the relevant Delivery Year's Base Residual Auction clearing price.

[19] PJM Transmittal at 3-4 n.7; *see* 2014 Order, 147 FERC ¶ 61,108 at PP 22-23. In its 2014 filing, PJM proposed a Replacement Capacity Adjustment Charge equal to the difference between the Base Residual Auction clearing price and the Incremental Auction clearing price, for any year in which the Base Residual Auction price is higher than the Incremental Auction price; the charge would be assessed on every replacement capacity transaction. *Id.* P 22.

[20] PJM Transmittal at 3-4 n.7. In the instant Incremental Auction Proposal, PJM proposes to reduce the number of Incremental Auctions by one, not two.

[21] *Id.*; *see* 2014 Order, 147 FERC ¶ 61,108 at PP 24-27. In its 2014 filing, PJM proposed to revise the Capacity Resource Deficiency Charge from the weighted average capacity resource clearing price plus the greater of 0.20 times of that clearing

(continued ...)

support their Sell Offers with a project development schedule, and requiring a facilities study agreement as a condition to offer into an RPM auction.[22] The Commission agreed with PJM that capacity market Sell Offers should not be speculative,[23] and found that PJM's existing tariff provisions "may be unjust and unreasonable in that they fail to promote long-term reliability in [PJM's] capacity market by possibly permitting speculative offers."[24] However, the Commission rejected PJM's proposed tariff revisions, finding that the proposal was beyond what was reasonable to ensure that offers are supported by physical resources.[25] Specifically, the Commission found that the proposal would have "significant undesirable effects such as increasing the risk for capacity market sellers, creating undue barriers to entry, limiting opportunity for beneficial trade, and unnecessarily raising the cost of capacity through the acquisition of excess capacity."[26] In light of these issues and "PJM's limited demonstration of the presence of speculative sell offers," the Commission found that the package of revisions was not just and reasonable.[27]

8. In the same order, the Commission initiated a separate proceeding under FPA section 206, in Docket No. EL14-48-000, and ordered a technical conference and comment procedures to "facilitate the development of a just and reasonable solution."[28] Subsequently, PJM asked the Commission to defer action on the technical conference and comment procedures in Docket No. EL14-48-000 on four separate occasions. The most recent of those requests was on March 9, 2018, concurrently with the instant filing. PJM sought deferral in order to, among other things, allow PJM to develop a more complete record of the results from additional Incremental Auctions under the

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price or $20 per MW-day to the weighted average capacity resource clearing price plus the greater of 0.5 times of the clearing price, or $50 per MW-day. 2014 Order, 147 FERC ¶ 61,108 at PP 24-25 & n.18.

[22] PJM Transmittal at 3-4 n.7; *see* 2014 Order, 147 FERC ¶ 61,108 at PP 12-13.

[23] 2014 Order, 147 FERC ¶ 61,108 at P 69.

[24] *Id.* P 2.

[25] *Id.* P 73.

[26] *Id.* P 68.

[27] *Id.*

[28] *Id.* P 74.

Capacity Performance construct and, as reflected in its most recent request, to permit the Commission to act on the instant filing.[29]

II. PJM's Incremental Auction Proposal

9. The Incremental Action Proposal consists of four main elements, described below, to revise the current capacity market auction rules. PJM asserts that the Incremental Auction Proposal reforms those rules that, according to PJM, may incentivize speculative Sell Offers in the Base Residual Auction, while continuing to allow Capacity Market Sellers to buy out of their capacity obligations when unforeseen circumstances arise. PJM proposes that, if accepted, the revisions apply to the Base Residual Auction and associated Incremental Auctions starting with the 2021/2022 Delivery Year and beyond.[30]

A. Release of Excess Capacity Commitments Using a Sell Offer Price Equal to the Base Residual Auction Clearing Price

10. PJM explains that the current RPM auction rules require PJM to release the excess capacity commitment quantity in the Incremental Auction, via a PJM Incremental Sell Offer,[31] if the forecasted peak load for the relevant Delivery Year, as determined at the time that the planning parameters for the Incremental Auction are established, is lower than the reliability requirement as determined at the time of the Base Residual Auction. Under current rules, the PJM sell-back offer price is based on PJM's updated capacity demand curve. PJM states that this requirement has resulted in PJM's submitting sell-back offers at a low price relative to the Base Residual Auction clearing price, often at $0/MW-day, which has driven down the Incremental Auction clearing prices.[32] According to PJM, this pricing rule does not properly recognize a rational price that a Capacity Market Seller should be willing to pay in order to avoid the significant cost it would otherwise incur due to an inability to physically deliver or satisfy performance requirements on a Base Residual Auction commitment, and does not recognize the

[29] *See* PJM Transmittal at 4-5; PJM, Report and Request for Further Deferral of Action, Docket No. ER14-1461-000, *et al.* (filed Mar. 9, 2018).

[30] PJM Transmittal at 14.

[31] We refer to PJM's release of excess capacity commitment quantity via a PJM Incremental Sell Offer as a "sell-back offer."

[32] PJM Transmittal at 15.

forgone value of the benefit provided to load[33] by a Base Residual Auction commitment that is subsequently replaced by PJM's release of the excess capacity commitment.[34]

11. To address these concerns, PJM proposes to submit sell-back offers at a price equal to the relevant Delivery Year's Base Residual Auction clearing price. PJM asserts that the Base Residual Auction clearing price reflects a Capacity Market Seller's need to replace a Base Residual Auction commitment for physical reasons, rather than for financial gain.[35] Under PJM's proposal, other Capacity Market Sellers in the Incremental Auction may continue to make sell-back offers at a price that is below the relevant Delivery Year's Base Residual Auction price. PJM contends that its proposal will provide significant mitigation of the historical persistent pattern of Incremental Auction prices being significantly lower than the corresponding Base Residual Auction prices, and will address the concern raised by Base Residual Auction Sell Offers that were made with little or no reasonable expectation of physical delivery. PJM clarifies that, as a result of PJM submitting sell-back offers at a price equal to the relevant Delivery Year's Base Residual Auction clearing price, PJM's load becomes excused from paying to the Capacity Market Seller the annual revenues that it initially agreed to pay, and the Capacity Resource is excused from providing the beneficial services that it initially agreed to provide.[36]

12. PJM explains that while the Commission previously rejected its 2014 Filing, which proposed to establish the Base Residual Auction clearing price as a price floor for excess capacity commitments that PJM sought to release in an Incremental Auction, the PJM Incremental Auction Proposal is distinguishable because the 2014 Filing contained several components not at issue here, and the instant Incremental Auction Proposal does not contain a replacement capacity adjustment charge.[37]

B. Allowance for Excusal of Excess Capacity After the Final Incremental Auction and Retention of Any Remaining Excess Commitments

13. Under current rules, any PJM sell-back offer MW quantity that does not clear in the Third Incremental Auction is allocated in the form of Excess Commitment Credits to

[33] PJM explains that annual energy market simulations showed the energy market benefit to load alone to be in the range of $86,000/MW-Year to $124,000/MW-Year. *Id.* at 13 (citing Bastian Aff. P 14).

[34] *Id.* at 15-16.

[35] *Id.* at 16.

[36] *Id.* at 17.

[37] *Id.* at 18.

PJM's Load Serving Entities (LSEs). PJM explains that, once allocated, an LSE may use its Excess Commitment Credits to replace the commitment of a Capacity Resource owned or contracted by the LSE, or the Excess Commitment Credits can be sold in a bilateral transaction to another party to be used as replacement capacity.[38] However, PJM asserts that, while all PJM LSEs are allocated a share of the total Excess Commitment Credits, it is only those LSEs that own a Capacity Resource or that can find a buyer for their Excess Commitment Credits that can benefit from the allocation. PJM contends that this disproportionately distributes the value of the excess capacity commitment MWs to the portion of PJM's load served by the LSEs that can monetize their Excess Commitment Credits.[39] As a result, PJM contends, the remaining PJM load are not equally compensated for the Excess Commitment Credits "while forgoing any incremental reliability and energy market benefits that the replaced commitment would otherwise have provided."[40]

14. Further, PJM asserts that retaining the existing Excess Commitment Credits mechanism would undermine PJM's proposal to submit sell-back offers at the Base Residual Auction clearing price or higher, because the Excess Commitment Credits mechanism provides an alternate way for Capacity Resources to access excess capacity commitments.[41] PJM contends that all Capacity Market Sellers that cannot deliver on a Base Residual Auction commitment should have the same financial incentives to replace that commitment, and should have access to the same replacement options, regardless of whether the Capacity Resource is affiliated with, owned, or contracted by an LSE. PJM explains that when PJM's released capacity clears in an Incremental Auction, the entirety of PJM load realizes a reduced overall cost, regardless of whether the LSE serves wholesale or retail customers or whether the LSE has ownership of a capacity commitment.[42]

15. To address these concerns, PJM proposes to eliminate the existing Excess Commitment Credits mechanism. To replace it, PJM proposes to allow Capacity Market Sellers to be excused from their Base Residual Auction commitments up to the level of any remaining excess capacity commitment MWs that are not sold in the Final Incremental Auction. Capacity Market Sellers that seek to be relieved of their

[38] *Id.* at 19.

[39] *Id.* at 20.

[40] *Id.*

[41] *Id.* at 20-21.

[42] *Id.* at 21-22.

obligations would forfeit capacity payments for any MWs excused. Under the proposal, during an open request window that closes 15 business days prior to the start of the relevant Delivery Year, Capacity Market Sellers may request to be excused from all or a portion of a Capacity Resource's Base Residual Auction commitment up to the total MW quantity of uncleared excess capacity commitment that remains after the Final Incremental Auction.[43] PJM explains that all Capacity Market Sellers with a Base Residual Auction commitment will have access to this mechanism to be relieved of their capacity obligation, and, in turn, all PJM LSEs will receive a *pro-rata* share of the value of relinquished Base Residual Auction commitments.[44]

C. Reduction in the Number of Incremental Auctions From Three to Two Per Delivery Year

16. Current market rules permit Capacity Market Sellers to buy out of their Base Residual Auction commitments through any of the three Incremental Auctions that are conducted in advance of the Delivery Year. PJM proposes to reduce the number of Incremental Auctions conducted for each Delivery Year from three to two.[45] Specifically, PJM proposes eliminating the Second Incremental Auction and renaming what is currently the Third Incremental Auction as the proposed Final Incremental Auction. PJM explains that, consistent with current rules, Capacity Market Sellers under its proposal may submit Buy Bids in both the First and Final Incremental Auctions, Existing Generation is required to offer all available capacity into both the First and Final Incremental Auctions, and Planned Generation Capacity Resources, Demand Resources, and Energy Efficiency Resources may elect to voluntarily offer capacity in both the First and Final Incremental Auctions. However, under the proposed revisions, PJM may procure additional MWs or release excess MWs only in the Final Incremental Auction. PJM explains that reducing the number of Incremental Auctions will mitigate against the ability of Capacity Market Sellers "to sell at an unjustifiably low price," while still allowing PJM and Capacity Market Sellers to buy and sell capacity to reflect changing needs.[46]

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[43] *Id.* at 22 (citing proposed Tariff, Attachment DD, sections 5.12(b)(viii)(B), 5.12(b)(ix).

[44] *Id.* at 23-24.

[45] *Id.* at 24.

[46] *Id.* at 24-25.

D. Revision of the Triggers for Determining the Quantity of PJM Buy Bids/Sell Offers

17. The current rules require PJM to procure additional capacity in any Incremental Auction if the updated reliability requirement exceeds the prior utilized reliability requirement, but in the First and Second Incremental Auctions, this requirement is triggered only if the updated reliability requirement exceeds the current level of committed capacity by more than or equal to the lesser of 500 MW or 1 percent of the applicable prior reliability requirement.[47] PJM proposes to eliminate this procurement requirement with respect to the First Incremental Auction, but retain the procurement requirement with respect to the Final Incremental Auction where the updated reliability requirement exceeds the current level of committed capacity by more than or equal to the lesser of 500 MW or 1 percent of the applicable prior reliability requirement. PJM explains that it will also retain the existing requirement to submit sell-back offers when the updated reliability requirement falls below the prior utilized reliability requirement, but this requirement would only apply in the Final Incremental Auction.[48] PJM explains that these revisions will eliminate the possibility that PJM buys additional capacity in one Incremental Auction only to submit sell-back offers in the next Incremental Auction for the same Delivery Year, or vice versa. PJM clarifies that these revisions will limit PJM's participation in Incremental Auctions to the point in time when PJM's final requirements are known and not subject to further change, and when Capacity Resource owners that cleared in the Base Residual Auction should be more certain of their ability to physically deliver the commitment.[49]

III. Notice of Filing and Responsive Pleadings

18. Notice of PJM's March 9, 2018 filing was published in the *Federal Register*, 83 Fed. Reg. 12,003 (2018), with interventions and protests due on or before March 30, 2018.

19. Timely motions to intervene were filed by Exelon Corporation (Exelon);[50] Delaware Division of the Public Advocate; the IMM; LS Power Associates, L.P.; PJM

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[47] PJM Transmittal at 26 (citing Tariff, Attachment DD, section 5.4(c)(1)).

[48] *Id.* at 27 (citing Tariff, Attachment DD, section 5.4(c)(3)(i)). The current rules require PJM to sell-back in the First and Second Incremental Auctions only if the decrease is more than or equal to the lesser of 500 MW or 1 percent of the applicable prior reliability requirement.

[49] *Id.*

[50] Exelon is the holding company for Atlantic City Electric Company, Baltimore Gas and Electric Company, Commonwealth Edison Company, Delmarva Power & Light *(continued ...)*

Industrial Customer Coalition (Industrial Customers); Dominion Energy Services, Inc. (Dominion Energy);[51] Wabash Valley Power Association, Inc.; PJM Power Providers Group (P3); Public Citizen, Inc.; Direct Energy;[52] Affirmed Energy LLC; East Kentucky Power Cooperative, Inc.; American Municipal Power, Inc.; NRG Power Marketing LLC and GenOn Energy Management, LLC; American Public Power Association; Calpine Corporation; Buckeye Power, Inc.; FirstEnergy Service Company; American Electric Power Service Corporation (AEP);[53] Maryland Office of People's Counsel; and Northern Virginia Electric Cooperative, Inc.

20. Protests and/or comments were filed by Industrial Customers, P3, FirstEnergy Services jointly with Dominion Energy Services (FirstEnergy/Dominion), Exelon, Advanced Energy Management Alliance (AEMA), and Direct Energy.

21. PJM and the IMM filed answers on April 16, 2018 and April 18, 2018, respectively. Direct Energy filed an answer to PJM's answer on April 20, 2018.

IV. Summary of Comments on PJM's Incremental Auction Proposal and Answers

22. Exelon, P3, Industrial Customers, and AEMA filed comments in support of PJM's proposal.[54] Industrial Customers assert that PJM's proposal addresses concerns that PJM's current approach of sell-back offers does not properly recognize the value of excess capacity to PJM load and provides a non-discriminatory excusal process for capacity commitments, creating benefits for consumers. Specifically, Industrial Customers assert that PJM's current approach of sell-back offers does not account for the cost savings that consumers would realize from retaining that capacity's participation in other PJM markets.[55] Industrial Customers assert that, when considered against the

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Company, PECO Energy Company, and Potomac Electric Power Company.

[51] Dominion Energy intervened on behalf of Virginia Electric and Power Company d/b/a Dominion Energy Virginia and Dominion Energy North Carolina, and Dominion Energy Generation Marketing, Inc.

[52] Direct Energy intervened on behalf of itself and its affiliates Direct Energy Business Marketing, LLC and Direct Energy Business, LLC.

[53] AEP intervened on behalf of Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company, Wheeling Power Company, and AEP Energy Partners, Inc.

[54] These parties emphasize that the proposal is the product of stakeholder effort and compromise.

[55] Industrial Customers Comments at 5-6.

forgone energy market benefits, it is only appropriate that the release of any excess capacity should at least return the cost that was paid by consumers when the capacity was initially acquired, as PJM proposes.[56] Industrial Customers also assert that PJM's existing Excess Commitment Credits mechanism circumvents the desired outcome of ensuring that consumers receive the commensurate value of excess capacity.[57] Industrial Customers assert that PJM's proposal ensures that Excess Commitment Credits are utilized in a just, reasonable, and not unduly discriminatory or preferential manner.[58] In addition, Industrial Customers state that continued efforts to evolve PJM's load forecasting methodologies would help alleviate the need to rely on such rules by limiting PJM's purchase of more capacity than needed.[59] Exelon and P3 emphasize the adverse consequences of resources offering into the Base Residual Auction with no intention of delivery.[60] P3 states that, although its members were not in support of every aspect of the PJM proposal, P3 supports PJM's filing in its entirety in order to materially improve the integrity of PJM capacity markets and to curtail speculative behavior.[61]

23. While AEMA states that it generally supports PJM's proposal, it points out some aspects of PJM's proposal that create concerns and do not represent a best-case scenario for any of AEMA's members.[62] AEMA explains that PJM's proposal increases all Capacity Suppliers' risk when offering in to the Base Residual Auction due to the likelihood of higher Incremental Auction clearing prices, leading to a higher potential cost to replace commitments.[63] AEMA states that some of its members find that the

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[56] *Id.* at 9. In addition, Industrial Customers state that PJM's proposal to submit sell-back offers equal to the Base Residual Auction price comports with the IMM's recommendation in its 2017 State of the Market Report, http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2017/2017-som-pjm-sec2.pdf.

[57] Industrial Customers Comments at 6-7, 10-12.

[58] *Id.* at 11. Industrial Customers assert that some LSEs may utilize Excess Commitment Credits to benefit consumers; however, currently, there are no assurances or requirements that all LSEs would appropriately use Excess Commitment Credits in this manner. *Id.* at 11 n.28.

[59] *Id.* at 13-14.

[60] Exelon Comments at 4-6; P3 Comments at 4-6.

[61] P3 Comments at 2.

[62] AEMA Comments at 2.

[63] *Id.* at 3-4.

reduction in the number of Incremental Auctions runs counter to a robust, transparent, and active marketplace, with multiple opportunities to right-size commitments that maximize value for consumers.[64] AEMA also explains that, according to many of its members, administratively setting the offer price of all of the PJM MWs sends a clear signal to other sellers of the price to beat in the Incremental Auctions, contrary to the objective of returning greater value to load. AEMA clarifies that some of its members believe that the remaining portions of PJM's proposal are unnecessary and restrictive.[65]

24. Direct Energy and FirstEnergy/Dominion filed protests. Direct Energy protests PJM's proposal to submit sell-back offers at a price equal to the relevant Base Residual Auction clearing price, arguing that it ignores how markets operate. Specifically, Direct Energy argues that the proposal undermines PJM's ability to sell excess capacity on behalf of load, by establishing irrational fixed Sell Offer prices that are known to all Capacity Market Participants prior to the auction, thereby ensuring that Capacity Market Participants can always clear by underbidding the Base Residual Auction clearing price.[66] Direct Energy argues that, if PJM's purpose is to reduce arbitrage between Base Residual Auction and Incremental Auction prices, PJM must improve load forecasting.[67] Direct Energy also disagrees with PJM's argument that its proposal will result in energy and ancillary service markets savings by retaining capacity excess, which Direct Energy asserts is premised on the flawed concept that financially viable resources that buy out of their capacity commitment in Incremental Auctions do not participate in energy and ancillary service markets; according to Direct Energy, PJM's argument is flawed because a resource that remains operational despite buying out in an Incremental Auction must make sales in these markets in order to remain economically viable. Direct Energy also states that resources do not make retirement decisions based on the ability to buy out of a capacity commitment in a single year.[68]

25. Direct Energy offers that a sloped offer curve for PJM excess capacity sales can produce reasonable outcomes in the Incremental Auction, pointing to the 2017/2018 Capacity Performance Transition Auction, where the sloped offer adjustment to the capacity demand curve was employed to ensure a reasonable return to load.[69] Direct

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[64] *Id.* at 4.

[65] *Id.* at 5.

[66] Direct Energy Protest at 2-3, 6-7.

[67] *Id.* at 2, 4-6.

[68] *Id.* at 7-8.

[69] *Id.* at 8-9.

Energy provides three specific alternative market changes that PJM could apply to alleviate its concern over speculative offers: (1) utilize a sloped curve adjustment to the PJM sell-back offer in cases where severe capacity excess results in a PJM Sell Offer that contains a portion valued at or near $0 based on the current capacity demand curve based valuation method; (2) bring back the concept of capacity procurement holdback in the Base Residual Auction; and (3) instead of the voluntary capacity commitment excusal construct that PJM included as part of its instant proposal to eliminate the existing Excess Commitment Credits mechanism, impose a compulsory excusal construct.[70]

26. FirstEnergy/Dominion oppose the elimination of the Excess Commitment Credits mechanism, asserting that the proposal does not prevent PJM from over-procuring capacity and does not ensure that PJM will achieve expected cost reductions associated with that over-procurement. FirstEnergy/Dominion argue that LSEs could potentially lose a valuable benefit, with only theoretical cost savings to compensate for the loss of that benefit. FirstEnergy/Dominion request that the Commission direct PJM to continue to allocate Excess Commitment Credits to LSEs if PJM enters the Delivery Year with surplus capacity.[71] FirstEnergy/Dominion contend that PJM's proposal will not reduce or eliminate incentives for those resources with high replacement rates to continue submitting price suppressive offers into the Base Residual Auction, displacing internal, existing generation resources, and subsequently buying out of their capacity obligations in an Incremental Auction at a profit.[72] Like AEMA, FirstEnergy/Dominion also oppose reducing the number of Incremental Auctions, arguing that limiting the number of Incremental Auctions will not deter sellers from seeking replacement capacity at lower clearing prices after they have already cleared the Base Residual Auction and obtained capacity obligations. FirstEnergy/Dominion argue that three Incremental Auctions provide important opportunities to all Capacity Market Participants to manage their capacity obligations, and capacity sellers should be able to exchange their obligations through liquid and transparent Incremental Auctions if they are unable to meet their obligations.[73]

27. FirstEnergy/Dominion also request that if the Commission nevertheless approves the instant proposal, the Commission should delay PJM's requested effective date by a year, to May 1, 2019, so that changes take effect for the 2019 Base Residual Auction. FirstEnergy/Dominion argue that this delay would allow sufficient time for Capacity

[70] *Id.* at 10-12.

[71] FirstEnergy/Dominion Protest at 3-4.

[72] *Id.* at 4-5.

[73] *Id.* at 5-6.

Market Participants to evaluate the overall impact the proposed changes will have on their RPM participation.[74]

28. In response to Direct Energy, PJM contends that PJM's proposal appropriately considers the value load is willing to pay for capacity, as well as the costs avoided by a Capacity Market Seller that purchases replacement capacity, when determining the price at which to release excess capacity commitments, which should exceed the Base Residual Auction clearing price. PJM further contends that a Capacity Market Seller's incentive is not to undercut PJM's Sell Offer price, but rather to clear the Incremental Auction only if the clearing price covers its own costs. According to PJM, if a Capacity Market Seller offers above its necessary going-forward costs, it risks not clearing in the Incremental Auction.[75] Moreover, PJM explains that prior to the relevant auction, PJM establishes an offer curve, which indicates PJM's Sell Offer to Capacity Market Sellers based on the quantity of commitments that will be released.[76] PJM asserts that the use of the sloped Sell Offer curve in the Third Incremental Auction for the 2017/2018 Delivery Year was significantly below the historical average and was not a successful example of a reasonable return to load from PJM's Incremental Auction sales, as asserted by Direct Energy.[77]

29. In response to FirstEnergy/Dominion's opposition to PJM's proposal to replace its Excess Commitment Credit mechanism with an excusal process, PJM argues that its proposal can provide the same relief as the current Excess Commitment Credit allocation for LSEs that own Capacity Resources with a capacity commitment. PJM asserts that the proposed excusal process will be available to any Capacity Resource that has a capacity commitment, and further asserts that any excess should be retained on behalf of PJM load because the economic value to load is greater than the amount that any Capacity Market Seller was willing to pay.[78]

30. PJM argues against Direct Energy's alternative proposal to impose a compulsory excusal construct instead of PJM's proposed voluntary capacity commitment excusal construct, asserting that arbitrarily determining which capacity commitments will be revoked and which commitments will remain would create various issues of fairness.[79]

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[74] *Id.* at 6-7.

[75] PJM Answer at 2-3.

[76] *Id.* at 3-4.

[77] *Id.* at 4-5.

[78] *Id.* at 5-6.

[79] *Id.* at 7.

PJM contends that the Commission does not need to consider this alternative, as PJM only needs to show its proposal is just and reasonable.[80] PJM argues against FirstEnergy/Dominion's claim that PJM's proposal will have a limited impact on converging capacity prices between the Base Residual Auction and Incremental Auctions because the minimum Sell Offer price only applies to excess capacity commitments released by PJM and not Sell Offers submitted by other Capacity Market Sellers. PJM asserts that "by limiting the sale of excess capacity in [Incremental Auctions] unless the price is at or above the relevant [Base Residual Auction] clearing price, the supply of capacity in the [Incremental Auctions] is effectively diminished at prices below the [Base Residual Auction]."[81]

31. In response to FirstEnergy/Dominion's argument that the proposed reduction in the number of Incremental Auctions from three to two will limit the ability of Capacity Market Sellers to effectively manage risks associated with their capacity obligations, PJM asserts that the First and Final Incremental Auctions will continue to allow Capacity Market Sellers to purchase replacement capacity if needed, and that Capacity Market Sellers will know with more certainty three months prior to the start of the Delivery Year whether their committed resource will be available for the relevant Delivery Year.[82] In response to FirstEnergy/Dominion's argument that Capacity Market Sellers will not have sufficient time to evaluate the overall impact of PJM's proposal, PJM contends that stakeholders reviewed and discussed solutions for approximately one year and that all interested parties have been aware of the proposal before PJM submitted its filing.[83]

32. In response to Direct Energy's opposition to PJM's proposal to price sell-back offers at the Base Residual Auction price, the IMM contends that excess capacity commitments have a value at least equal to the Base Residual Auction clearing price. The IMM argues that PJM load purchases capacity to provide both capacity market and energy market benefits, and that PJM load pays the full Base Residual Auction price for this excess capacity and should receive full value for the capacity if sold.[84] Though the IMM agrees with PJM's proposal to eliminate Excess Commitment Credits,[85] the IMM argues that PJM's proposed excusal process should not be accepted because it

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[80] *Id.* (citing 16 U.S.C. § 824d).

[81] *Id.* at 8.

[82] *Id.* at 9 (citing FirstEnergy/Dominion Protest at 5-6).

[83] *Id.* at 9-10.

[84] IMM Answer at 1-2.

[85] *Id.* at 3.

undermines the purpose of the Capacity Performance construct and incentives. The IMM contends that, if the excusal process is implemented, Capacity Market Sellers would know that they have an opportunity, after all Incremental Auctions are complete, to be relieved of their capacity obligations, which would influence how Capacity Market Sellers offer into Incremental Auctions.[86]

33. In its answer, Direct Energy argues that, knowing that PJM will submit sell-back offers at the Base Residual Auction clearing price, Capacity Market Participants will be incentivized to offer below PJM's price and ensure that they clear the Incremental Auction, and that load does not realize any cost benefit from sales made by third parties below the price set by PJM's sell-back offers.[87] Further, Direct Energy asserts that PJM's statements with respect to appropriate Incremental Auction price signals in this proceeding conflict with PJM's statements in Docket No. ER18-1314-000 regarding PJM's Capacity Repricing proposal.[88] Direct Energy argues that the price paid for capacity in the Base Residual Auction is irrelevant to the Incremental Auction clearing price, and that the demand for replacement capacity in each Incremental Auction relative to supply dictates the price of capacity in the Incremental Auction.[89]

34. Direct Energy contends that, while market sellers should generally offer consistent with their costs to provide capacity, market sellers also offer consistent with levels to ensure their offers clear. Direct Energy argues that the fact that PJM already publishes its sell offers under the existing market rules is irrelevant and that setting the price at the Base Residual Auction clearing price "will make it significantly easier for other market sellers to undercut PJM's published fixed price offer."[90] Direct Energy contends that, under its alternative proposal, the price level and quantity at which a PJM offer will clear the Incremental Auction is entirely dependent on the demand in the Incremental Auction, which is not known to other market participants when they submit their offers prior to the start of the Incremental Auction.[91] In response to PJM, regarding the use of the sloped Sell Offer curve in the Third Incremental Auction for the 2017/2018 Delivery Year, Direct Energy further contends that the auction provided a favorable return to load and asserts that, if PJM's Incremental Auction Proposal had been in effect, it is highly

[86] *Id.* at 3-4.

[87] Direct Energy Answer at 2-3.

[88] *Id.* at 3.

[89] *Id.* at 4.

[90] *Id.* at 5.

[91] *Id.* at 6.

unlikely that any of the excess commitments offered by PJM would have cleared the 2017/2018 Third Incremental Auction, leading to load not receiving any return.[92] Direct Energy asserts that its alternative proposal would utilize a process to mandate excusals of resource capacity commitments on a *pro-rata* basis on an amount equal to any quantity priced at or near $0 based on the current capacity demand curve based incremental offer valuation methodology, as defined in the PJM Tariff, and this reduction would apply to each capacity resource in proportion to its share of the total committed unforced capacity for a given Delivery Year.[93]

V. Discussion

A. Procedural Matters

35. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2017), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

36. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2017), prohibits an answer to a protest or answer unless otherwise ordered by the decisional authority. We will accept the answers because they have provided information that assisted us in our decision-making process.

B. Commission Determination

37. For the reasons discussed below, we reject, as unjust and unreasonable, PJM's Incremental Auction Proposal. PJM proposes to submit sell-back offers at the relevant Base Residual Auction clearing price, thereby setting the sell-back offer price without regard to PJM's capacity demand curve. The Commission has previously rejected such an approach,[94] and we do so here again.

38. The central issue here is whether to permit PJM to set the price for capacity PJM sells back to the market in an Incremental Auction at the Base Residual Auction Price. Prior to the Base Residual Auction, PJM establishes a downward sloping capacity demand curve, which reflects the relationship of the price of capacity to quantity, taking into account the amount of capacity that PJM anticipates it needs to meet its reliability targets. Based on updated reliability requirements due to revised load forecasts between the Base Residual Auction and the Incremental Auctions, PJM updates the capacity demand curve and, through the Incremental Auctions, either procures additional capacity,

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[92] *Id.* at 6-7.

[93] *Id.* at 7-8.

[94] *E.g.*, *PJM Interconnection, L.L.C.*, 131 FERC ¶ 61,168, at PP 82-86 (2010).

or more frequently, sells back excess capacity. PJM points out that, in most cases, it has over-procured capacity in the Base Residual Auction and that the large amount of excess capacity offered in the Incremental Auction consistently drives the prices in these auctions to relatively low levels.

39. PJM's Incremental Auction Proposal here is similar to its 2009 proposal that the Commission rejected. In its 2009 proposal, PJM proposed to set the price of its sell-back offers at the Weighted Average Resource Clearing Price. For the First Incremental Auction, this would be the Base Residual Auction Clearing Price, and PJM predicted that it would be very close to that price in the Second Incremental Auction, as well.[95] In its order rejecting PJM's 2009 proposal, the Commission explained that, "[o]ther things equal, the value of a given amount of capacity is lowered when the [r]eliability [r]equirement decreases," which is reflected in the updated (lowered) capacity demand curve; thus the Commission reasoned that the sell back price should be based on the updated capacity demand curve.[96] The Commission also explained that PJM's 2009 proposal was flawed because:

> . . . the average clearing price likely will be higher than the marginal value of the capacity to PJM based on the changed [demand] curve. By offering to sell at a price above the capacity's value, the capacity is less likely to be sold even though the price offered is equal to or
>
> greater than the value of that capacity as reflected on the [demand] curve. Thus, PJM's customers could be required to pay for some capacity whose cost exceeds its value.[97]

PJM's proposal to price its sell-back offers at the Base Residual Auction clearing price, which is similar to the changes proposed in the 2009 filing, is flawed because it fails to reflect that the value of a given amount of capacity is lowered when the reliability requirement changes, a concept reflected in PJM's updated capacity demand curve.

40. In 2014, as part of a package of reforms targeting the same alleged speculative behavior at issue in the instant filing, PJM proposed to offer every sell-back MW in the Incremental Auction at the Base Residual Auction clearing price. The Commission found that the package as a whole would "simultaneously increase risk to suppliers and costs to load, without guaranteeing equally offsetting benefits to the PJM grid as a

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[95] *Id.* P 83.

[96] *Id.* PP 82-83, 86.

[97] *Id.* P 84.

whole."[98] In addition, regarding PJM's proposed Replacement Capacity Adjustment Charge, which effectively equated a Capacity Resource's sell-back costs to the Base Residual Auction price, the Commission found that:

> …PJM's proposal denies the possibility of resources recouping at least some sunk costs through the purchase of replacement capacity. Thus, PJM's proposal will increase risk to capacity market sellers, risks that may only be partially mitigated through increased offers in the Base Residual Auction, and that may result in some resources exiting PJM's markets, even if they are supported by physical offers.[99]

The instant PJM proposal similarly increases risk to suppliers, by increasing the price at which PJM is willing to buy back capacity and thus reducing the likelihood that a resource with a capacity supply obligation will be able to recoup sunk costs.

41. In 2017, PJM proposed to revise its pricing methodology for the release of excess committed capacity in the Third Incremental Auction for the 2017/2018 Delivery Year only. A component of PJM's proposal was to revise the shape of its sell-back offer curve such that it reflected a price floor above a level consistent with the capacity market demand curve. While the Commission allowed for a modest alteration to the shape of the sell-back offer curve, the Commission found that PJM's proposed anchor points on the revised sell-back offer curve were "inconsistent with the established way PJM's markets represent the value of excess capacity to load."[100] The Commission again found that the capacity demand curve represents a just and reasonable approximation of the value of excess capacity to load, and thus required PJM to set its proposed anchor points consistent with the capacity demand curve. PJM's proposal to price its sell-back offers at the Base Residual Auction clearing price, like its 2017 proposal to revise the shape of its sell-back offer curve, is inconsistent with the value of excess capacity to load established with the capacity demand curve.

42. PJM argues that the Incremental Auction Proposal is needed to address the problem of speculative behavior in the capacity market, and offers data regarding replacement rates to support its argument. PJM has not supported its position that speculative behavior is, in fact, occurring. As discussed below, replacement rates do not necessarily indicate speculative behavior. Regardless, we do not find that setting prices in a manner that does not reflect demand is justified to cure such behavior. PJM also

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[98] 2014 Order, 147 FERC ¶ 61,108 at P 73.

[99] *Id.* P 71.

[100] *PJM Interconnection, L.L.C.*, 158 FERC ¶ 61,010, at P 23 (2017).

argues that the Commission's rejection of its 2014 Filing, in which PJM proposed to establish the Base Residual Auction clearing price as a price floor for excess capacity commitments, does not compel a similar outcome here, because the 2014 Filing and the instant filing were differing packages of proposals and the instant filing does not propose a Replacement Capacity Adjustment Charge. We disagree with PJM's argument because it ignores the Commission's consistent rejection of tariff revisions—however they are packaged—that price sell-back offers without regard to their value as reflected on the updated demand curve. PJM's proposal to assign a value to sell-back offers at a pre-determined price rather than market price is inconsistent with the established way that PJM's markets represent the value of excess capacity to load.

43. On three separate occasions, the Commission has rejected as unjust and unreasonable PJM's proposals to value sell-back offers at a level that differs from the valuation of excess of capacity reflected by PJM's capacity demand curve. We again find PJM's proposal to submit sell-back offers at the relevant Base Residual Auction clearing price to be unjust and unreasonable, as it fails to establish a reasonable price for excess capacity as the Commission has found in the prior orders and, as a result, the Incremental Auctions would not adequately correct for PJM's over-procurement of capacity in a Base Residual Auction and would not produce prices commensurate with load's value of the over procured capacity.[101] Accordingly, we reject the Incremental Auction Proposal. Because PJM submitted the Incremental Auction Proposal as a package of reforms, we do not address other aspects of the proposal. Absence of discussion on other aspects of the proposal, however, is not an indication of how the Commission would rule on the merits of those issues if submitted separately from the Incremental Auction Proposal.

44. The Commission established the proceeding pending in Docket No. EL14-48-000 to consider whether the PJM Tariff may be unjust and unreasonable by possibly permitting speculative offers. In the instant proceeding, PJM asserts that the Incremental Auction Proposal is needed to reduce speculative behavior. To demonstrate speculative behavior, PJM relies on data indicating the frequency by which resources, particularly Demand Resources, replace their capacity, inferring that these resources are speculating by making Sell Offers into the Base Residual Auction without any reasonable possibility of delivering that capacity. However, the replacement rates PJM cites do not necessarily indicate speculative behavior. They may instead reflect the ability of resources, particularly Demand Resources, to relieve their capacity obligations while efficiently and profitably following economic signals. For example, if a Demand Resource's going

[101] We do not find persuasive PJM's assertion that its proposal will reduce overall costs to load because it over-procures capacity, which may lead to lower energy market prices. Lower energy market prices will be more likely to result from properly designed markets rather than proposing to make changes in one market with a hope that that will lead to lower prices in the other market.

forward costs are higher than the clearing price in the applicable Incremental Auction, it would be efficient, as well as profitable, for the provider to buy back its capacity obligation, even if the provider was fully capable of providing its service.

45. Additionally, we note that, in recent years, PJM has implemented reforms that reduce the likelihood of speculative offers. PJM has procedures in place to verify that capacity resources offering into the Base Residual Auction have a good faith basis for submitting those offers. For example, PJM has implemented requirements for Demand Resource providers to provide certain information prior to submitting offers in the Base Residual Auction to demonstrate that Demand Resources will be available by the applicable Delivery Year.[102] In addition, PJM also requires generators to provide documentation and meet several requirements before and after offering into the Base Residual Auction.[103] In addition, PJM's Capacity Performance construct provides performance requirements and penalties for resources unable to provide capacity when the system requires it.[104] These requirements and penalties create significant economic risk to any would-be speculators who retain a capacity commitment into a given Delivery

[102] *See PJM Interconnection, L.L.C.*, 146 FERC ¶ 61,150 (2014) (accepting PJM's proposal to require Demand Resource providers to submit a suite of information prior to the Base Residual Auction, including, among other things, the identities of existing Demand Resources, key assumptions underlying planned Demand Resource quantities such as end-use customer site-specific information, and a certification that the information supplied is true and correct with a reasonable expectation that the resources will be registered by the applicable Delivery Year).

[103] For example, a planned generator is required to execute an Impact Study Agreement or Facilities Study Agreement prior to participating in the Base Residual Auction. Once a planned generator has an obligation obtained in the Base Residual Auction, an Interconnection Service Agreement (ISA) must be provided prior to the start of the relevant First Incremental Auction. As part of the ISA process, a generator must demonstrate that it has obtained any necessary local, county, and state site permits; entered a fuel delivery agreement and water agreement, if necessary, that it controls any necessary rights of-way for fuel and water interconnections; and signed a memorandum of understanding for the acquisition of major equipment. Other milestones may include site acquisition, regulatory certifications (if required), acquisition of any necessary third-party financial commitments, engineering and detailed design activities, unit commissioning, testing, and similar events. *See generally* PJM Manuals M18 (Capacity Market) and M14c (Generation and Transmission Interconnection Facility Construction), and PJM Tariff, § 212.5.

[104] *See PJM Interconnection, L.L.C.*, 151 FERC ¶ 61,208, at P 158 (2015), *order on reh'g*, 155 FERC ¶ 61,157 (2016).

Year. PJM has also implemented changes to its load forecasting methodology,[105] which should help reduce persistent differences between load forecasts in the Base Residual Auction and the Incremental Auctions. As load forecasting continues to improve, in turn, the quantity of capacity procured in the Base Residual Auction may be reduced and the quantity of PJM's sell-back offers should decline, reducing any difference in prices between the Base Residual Auction and the Incremental Auction, thereby further reducing the likelihood of speculative offers.

46. For these reasons, we find that there is no need for the Commission's further consideration of solutions to address potential speculative behavior in the Base Residual Auctions and Incremental Auctions in the FPA section 206 proceeding in Docket No. EL14-48-000. Accordingly, we terminate the proceeding in Docket No. EL14-48-000.

The Commission orders:

(A) PJM's Incremental Auction Proposal is hereby rejected, as discussed in the body of this order.

(B) The proceeding in Docket No. EL14-48-000 is hereby terminated, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

[105] PJM implemented changes to the 2016 load forecast, which are documented in PJM Manual 19 (Load Forecasting), as discussed in PJM's Load Forecasting Model Whitepaper – April 27, 2016, http://www.pjm.com/~/media/library/reports-notices/load-forecast/2016-load-forecast-whitepaper.ashx. PJM's 2018 load forecast report is also *available at* http://www.pjm.com/-/media/library/reports-notices/load-forecast/2018-load-forecast-report.ashx?la=en.