UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Independent Market Monitor for PJM,	**)**	
	)	
v.	**)**	**Docket No. EL24-126-000**
	)	
PJM Interconnection, L.L.C.	**)**	

ANSWER OF PJM INTERCONNECTION, L.L.C.

In accordance with Rules 213 and 217 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("Commission"),[1] PJM Interconnection, L.L.C. ("PJM") submits this Answer to the Complaint filed by the Independent Market Monitor for PJM Interconnection, L.L.C. ("Market Monitor") challenging PJM's methodology for adjusting the load forecast, known as the "addback," which PJM has implemented in connection with capacity auctions under the Reliability Pricing Model[2] ("RPM") since 2015. The addback is a load forecast mechanism found in the PJM Manuals that reconstitutes the quantity of Energy Efficiency ("EE") Resources that clear in RPM Auctions into the PJM load forecast. This addback is manifested by shifting the administratively determined demand curve to the right by an amount that matches the cleared quantity of EE Resources in a given auction.

The Market Monitor makes several assertions, each of them groundless. According to the Market Monitor, the addback does not belong in the PJM Manuals and PJM unlawfully changed the filed tariff rules by including the addback in PJM Manual 18. Per the Complaint, the Market Monitor believes that PJM should have filed the addback with the Commission under Federal

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[1] 18 C.F.R. §§ 385.213 & .217 (2023).

[2] Capitalized terms used herein and not otherwise defined have the meaning used in the PJM Open Access Transmission Tariff ("Tariff"), the PJM Operating Agreement ("OA"), the PJM Reliability Assurance Agreement ("RAA"), or the PJM Manuals.

Power Act ("FPA") section 205.[3] Next, the Market Monitor contends that PJM has been wrongly paying the capacity market clearing price to EE Resources that do not meet the definition of "Energy Efficiency Resources" provided in the Tariff and Reliability Assurance Agreement ("RAA").[4] Ultimately, the Market Monitor claims that PJM has violated its Tariff and FPA section 205. To remedy these alleged violations, the Market Monitor asks that PJM be directed to discontinue payments to EE Resources for EE that is included in its load forecasts and that PJM be ordered to recoup past EE payments that violated the Tariff.[5]

The Market Monitor's claim that the addback violates the "rule of reason" has no merit. The Tariff and RAA provide PJM with significant discretion to modify EE participation rules through modifications of the PJM Manuals.[6] Indeed, the addback's inclusion in the PJM Manuals is explicitly authorized by the PJM Tariff.[7] The addback has been applied by PJM according to stakeholder-approved amendments to the PJM Manuals adopted in 2015.[8] The Commission's orders have long recognized that the addback was designed to address changes in the methodology for determining the PJM load forecast in order to preserve the ability of EE Resources to qualify for capacity payments as they had under the previous load forecast methodology.[9] The addback

[3] *See Indep. Market Monitor for PJM v. PJM Interconnection, L.L.C.*, Docket No. EL24-126-000, Complaint of the Independent Market Monitor for PJM at 7-8 (July 11, 2024). ("Complaint").

[4] *Id.* at 1-2.

[5] *Id.* at 9.

[6] *See* RAA, Sched. 6 § L.1; Tariff, Attach. DD-1 § L.1.

[7] *See* Tariff, Attach. DD, § 5.10(a) ("For any auction, the Updated Forecast Peak Load . . . shall be reflected in the derivation of the Variable Resource Requirement Curves, in accordance with the methodology specified in the PJM Manuals.").

[8] *See infra* at 7-8.

[9] *Advanced Energy Econ.*, 161 FERC ¶ 61,245, at P 7 (2017), *reh'g denied & clarification granted in part*, 163 FERC ¶ 61,030 (2018).

is an implementation detail designed to enable EE Resources to participate in the RPM Auctions based on the Tariff's definition of "Energy Efficiency Resource," and it is therefore appropriately implemented through the PJM Manuals under the Commission's "rule of reason" analysis. Moreover, the Commission's orders recognize that the addback provision is provided in the PJM Manuals.[10] Finally, the addback was extensively reviewed by stakeholders in 2015, through a total of seven meetings wherein PJM even modified its initial proposal based on stakeholder feedback, before the stakeholders voted to endorse the inclusion of the addback in the PJM Manuals by acclamation with 12 objections and one abstention.[11]

For each of the foregoing reasons, and others detailed below, the Commission should reject or summarily dispose of the Complaint as a matter of law, particularly with regard to the Market Monitor's request for retroactive rate changes for capacity auctions that have already been conducted, including the 2025/2026 Base Residual Auction.

I. BACKGROUND

A. EE Resources Originally Qualified as Capacity Resources Because of a Lag in Recognizing Their Impact in the RPM Load Forecast

The RPM Auction is designed to procure resource adequacy at just and reasonable rates through a market-driven mechanism. The basic elements of the RPM Auction consist of an administratively determined demand curve, called the Variable Resource Requirement ("VRR") Curve and a supply curve consisting of offers for Capacity Resources that are submitted by Capacity Market Sellers. The quantity of capacity procured and the price paid for capacity are

[10] *See id.*

[11] *See* PJM, Markets and Reliability Committee, *Minutes: December 17, 2015* (Jan. 28, 2016), https://pjm.com/-/media/committees-groups/committees/mrc/20160128/20160128-item-01-draft-minutes.ashx. The relevant Markets and Reliability Committee Meetings were held on October 1, October 16, October 22, November 6, November 19, December 9, and December 17, 2015.

generally determined based on the intersection of the two curves. Setting the VRR Curve correctly is critical for RPM to operate as designed. As the Commission has explained:

> In designing the VRR Curve, PJM seeks to ensure that the amount of capacity it procures satisfies a loss of load expectation of one event in 10 years. The price axis of the VRR Curve contains multiples of the Net CONE value, and the megawatt quantity axis contains the target reliability requirement. Higher prices (above Net CONE) are associated with capacity shortage conditions and lower prices are associated with excess capacity conditions.[12]

Using a VRR Curve that procures insufficient capacity would have adverse reliability impacts and, over time, would result in PJM failing to achieve the one-day-in-ten-years reliability standard.[13]

As originally proposed, EE Resources did not qualify as Capacity Resources in PJM's RPM Auctions. Nonetheless, based on a June 30, 2008 Brattle Group report ("Brattle Report") filed with the Commission, PJM was directed to convene the PJM stakeholder process in order to consider potential modifications to RPM.[14] Consequently, the potential inclusion of EE projects in RPM Auctions was a potential modification that the stakeholders considered.[15] Specifically, the Brattle Report "recommend[ed] that PJM consider incorporating the value of EE . . . initiatives either through updated and proactive adjustments to its load forecasts or by allowing direct participation as a capacity resource in RPM Auctions."[16] PJM eventually adopted the proposal to

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[12] *PJM Interconnection, L.L.C.*, 153 FERC ¶ 61,035, at P 3 (2015).

[13] *See id.* P 29 ("Evaluating an administrative demand curve requires a reasonable balancing of objective factors, including the projected impact on reliability and cost."); *PJM Interconnection, L.L.C.*, 149 FERC ¶ 61,183, at P 55 (2014) ("[I]t would be an unacceptable outcome for the base residual auction to fall short of reasonable reliability objectives.").

[14] *See PJM Interconnection, L.L.C.*, 124 FERC ¶ 61,272, at P 52 (2008).

[15] *Id*. P 16.

[16] Johannes Pfeifenberger, *et al.*, *Review of PJM's Reliability Pricing Model (RPM)* at 115 (June 30, 2008), https://www.brattle.com/insights-events/publications/review-of-pjms-reliability-pricing-model-rpm/.

allow EE Resources to participate in RPM Auctions until the load forecast reflected the load reductions associated with their installation.

On December 12, 2008, after engaging on this matter through the stakeholder process, PJM filed a suite of proposed enhancements to the RPM Auction design, including revisions to permit EE Resources to qualify as Capacity Resources provided that they properly verified their operation and installation. A Commission settlement process subsequently resulted in modifications to the December 12, 2008 filing but not to the provisions proposed by PJM allowing EE Resources to participate in RPM Auctions. PJM's December 12, 2008 filing explained the participation of EE Resources in capacity auctions as follows:

> [T]he reliability value of non-dispatchable resources such as energy efficiency (''EE'') initiatives is recognized within RPM [as originally adopted] only after the impact of EE programs is reflected in the historic load data. RPM's base residual auction is conducted three years before the Delivery Year, but it relies on forecasts based on peak loads from the summer before the auction, i.e., four years before the Delivery Year. As a result, there is a "gap" between when the EE resource is online, but not recognized in the load forecast used in the RPM auctions, and when the EE resource is recognized in the load forecast.[17]

PJM thus proposed to fill this "gap" by allowing an EE Resource that demonstrates its capability to qualify as a Capacity Resource for four consecutive Delivery Years. "After that reduction is reflected in the load forecast, the customer's load obligation, and capacity requirements, are reduced even without the changes proposed in [the December 12, 2008 filing]."[18]

The Commission accepted PJM's rationale for allowing EE Resources to participate in RPM.[19] Further, the Commission found that "[a]s a result of not including the EE in the load

[17] *PJM Interconnection, L.L.C.*, Docket No. ER09-412-000, Transmittal Letter at 29 (Dec. 12, 2008) (footnote omitted).

[18] *Id*. at 32.

[19] *PJM Interconnection, L.L.C.*, 126 FERC ¶ 61,275, at P 131 (2009).

forecast, the VRR curve fails to move to the left, increasing the price paid and capacity acquired compared with a load forecast that correctly included EE."[20]

PJM memorialized the interplay between the participation of EE Resources in RPM Auctions and the inclusion of EE Resources in the load forecast for a given Delivery Year in the definition of "EE Resource" proposed in the December 12, 2008 filing and accepted by the Commission:

> "Energy Efficiency Resource" shall mean a project, including installation of more efficient devices or equipment or implementation of more efficient processes or systems, meeting the requirements of RAA, Schedule 6 and exceeding then-current building codes, appliance standards, or other relevant standards, designed to achieve a continuous (during the periods described in Reliability Assurance Agreement, Schedule 6 and the PJM Manuals) *reduction in electric energy consumption that is not reflected in the peak load forecast prepared for the Delivery Year for which the Energy Efficiency Resource is proposed*, and that is fully implemented at all times during such Delivery Year, without any requirement of notice, dispatch, or operator intervention.[21]

This definition expressly provides that to be eligible for participation in an RPM Auction, the load reductions associated with the EE Resource should not also be reflected in the load forecast for the same Delivery Year.

B. Upon Stakeholder Engagement and Stakeholder Endorsement, PJM Modified the PJM Manuals in 2015 to Include the Addback to Preserve the Ability of EE Resources to Participate in RPM Auctions

In 2015, PJM modified its procedures for conducting the peak load forecast used for RPM Auctions. At that time, as explained in the affidavit of Mr. Gledhill that PJM submitted in related proceedings, PJM incorporated statistical analysis of end-use intensity trends predictive of the

[20] *Id.*

[21] RAA, Definitions, "Energy Efficiency Resource" (emphasis added); *see* Tariff, Attach. DD-1, § L.1; RAA Sched. 6, § L.1 (emphasis added).

expected impact of EE enhancements in future Delivery Years.[22] Prior to this enhancement, EE impacts were captured through lower observed load.[23] As explained above, under the old methodology, because the impact of the installation of an EE Resource would not be observed in the peak load forecast used for RPM Auctions until four years after the project became operational, there would be a four-year lag between the time the EE Resource was built and the time the load reduction would be recognized in RPM. The 2015 enhancements to the load forecast methodology eliminated this lag.

PJM recognized that the change in the peak load forecast methodology, unless addressed, would result in double-counting of EE Resources contrary to (1) the Commission's rationale for directing PJM to consider allowing EE Resources to participate in RPM markets, (2) the definition of EE Resources found in the RAA and Tariff, and (3) the reliability needs of the PJM system if EE were not added back to the load forecast. As a result, PJM publicly and transparently reviewed this matter through the stakeholder process in 2015.

In the stakeholder proceedings, PJM made abundantly clear in the presentations at the November 19, 2015 and December 17, 2015 Markets and Reliability Committee ("MRC") meetings that the addback's purpose was to "accommodate continued EE Resource participation in the capacity market."[24] For example, PJM stated in its November 2015 presentation:

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[22] *See Joint Consumer Advocates v. PJM Interconnection, L.L.C.*, Docket No. EL24-118-000, Answer of PJM Interconnection, L.L.C., Ex. A, Aff. of Andrew Gledhill at P 10. That Affidavit and Mr. Gledhill's Supplemental Affidavit in EL24-118-000 are adopted and attached to this Answer as Exhibits A and B.

[23] *Id.* P 12.

[24] PJM, *M18 and M18B Revisions to Accommodate EE Resource Participation in RPM When EE is Reflected in the Peak Load Forecast* at 6 (Nov. 19, 2015), https://www.pjm.com/-/media/committees-groups/committees/mrc/20151119/20151119-item-03b-draft-manual-18-and-18b-revisions-presentation.ashx ("November 2015 Presentation"); *see* PJM, *M18 and M18B Revisions to Accommodate EE Resource Participation in RPM When EE is Reflected in the Peak Load Forecast* at 3 (Dec. 17, 2015), https://www.pjm.com/-/media/committees-groups/

- [L]anguage of EE Resource definition [specifying that eligible projects must "not [be] reflected in the peak load forecast prepared for the Delivery Year for which the Energy Efficiency Resource is proposed"] prevents adverse reliability impact of double counting energy efficiency measures as a resource in an RPM auction . . . and again as a load forecast reduction

- Unlike current model, new peak load forecast model does reflect energy efficiency measures in the peak load forecast

- To prevent double counting, an add-back mechanism is necessary in order to accommodate continued EE Resource participation in the capacity market when new peak load forecast model is adopted[25]

The PJM Manual revisions further demonstrate the addback's purpose. As explained in the revisions to PJM Manual 18B approved at the December 17, 2015 MRC:

> Because energy efficiency measures are reflected in the peak load forecast for a Delivery Year for which an auction is being conducted, the auction parameters must be adjusted, as described is Section 2.4.5 of Manual 18, for the EE Resource(s) that are proposed for that auction in order to avoid double-counting of the energy efficiency measures.[26]

And, as explained in the revisions to PJM Manual 18 approved at the December 17, 2015 meeting:

> Because energy efficiency measures are reflected in the peak load forecast [beginning in 2015] for a Delivery Year for which an auction is being conducted, the auction parameters must be adjusted . . . for the EE Resource(s) that are proposed for that auction in order to avoid double-counting of the energy efficiency measures."[27]

The addback thus *enabled* EE Resources to continue participating in RPM Auctions as they had since 2009. In short, PJM's stakeholders, including consumer advocates and the Market Monitor, fully understood the rationale for reconstituting cleared EE Resources back into the PJM load

committees/mrc/20151217/20151217-item-04-draft-manual-18-and-18b-revisions-presentation.ashx ("December 2015 Presentation").

[25] November 2015 Presentation at 6; *see* December 2015 Presentation at 3.

[26] PJM Manual 18B: Energy Efficiency Measurement & Verification, § 1.1 (Overview of Energy Efficiency).

[27] PJM Manual 18: PJM Capacity Market, § 2.4.5 (Adjustments to RPM Auction Parameters for EE Resources).

forecast when these enhancements were endorsed in an open and transparent stakeholder forum by acclamation at the MRC on December 17, 2015.

Consistent with the goal of enabling EE Resources to continue participating in the RPM Auctions, the addback amount is commensurate with the levels of EE Resources that participate in the RPM Auctions. In fact, the level of the addback is equal to the amount of EE Resources that clear in the auction.[28] Mechanically, because the addback is a quantity adjustment affecting capacity procurement targets in RPM, it shifts the VRR Curve to the right by the addback amount. PJM Manual 18 explicitly authorizes this shift, stating that "[t]he Variable Resource Requirement Curve will be shifted rightward along the horizontal axis by a quantity equal to the EE addback MW quantity as explained in Section 2.4.5 [of PJM Manual 18.]."[29]

In sum, as explained above, the Commission's 2009 order authorized EE Resources to participate as Capacity Resources to cover the time "gap" between when they were placed into service and when their reductions would be reflected in the RPM peak load forecast. However, a fundamental premise of the Commission's approval of EE Resource participation in RPM was that an EE Resource should not simultaneously qualify as a load reducer and source of supply, i.e., be "double counted." Accordingly, in 2015, when PJM modified the load forecast method to include

[28] *See id.* Under the current method, the addback matches the cleared EE Resource MW quantity in the auction across the RTO and each LDA. This methodology was approved at the October 20, 2021 MRC for the RPM Auctions beginning with the 2023/2024 Delivery Year. *See* PJM Markets and Reliability Committee, *Consent Agenda E, Executive Summary Manual Changes* at 1 (Oct. 20, 2021), https://www.pjm.com/-/media/committees-groups/committees/mrc/2021/20211020/20211020-consent-agenda-e-2-manual-18-revisions-executive-summary.ashx. Prior to this revision, the amount of the cleared EE MW could also be adjusted based on a ratio that took account of the clearing levels of EE Resources in previous Delivery Years.

[29] PJM Manual 18 § 3.4.1 (Plotting the Variable Resource Requirement Curves); *see id.* § 2.4.5, n.9 ("The increase in Reliability Requirement [associated with the EE addback] is accomplished in each BRA by shifting the VRR Curve of the RTO and each affected LDA to the right by the MW quantity of the increase.").

anticipated EE load reductions, PJM had to adjust the load forecast upward to protect system reliability and avoid the double-counting prohibited by the Tariff. PJM and its stakeholders decided to retain the *status quo* by adding EE Resources back into the load forecast in 2015, thereby allowing EE Resources to participate in RPM as they had done prior to the overall load forecast enhancements.

II. ARGUMENT

A. PJM Properly Included the Addback in the PJM Manuals

1. The Addback is an Implementation Detail Properly Included in the PJM Manuals

The Market Monitor claims that PJM "unlawfully change[d] the filed tariff rules when it create[d] an 'addback' in Manual 18"[30] and that PJM cannot rely on the PJM Manual provisions memorializing the addback.[31] Without specifying it as such, the Market Monitor essentially claims that the inclusion of the addback in the PJM Manuals violates the Commission's "rule of reason." Simply put, however, the Market Monitor is wrong to claim that PJM has violated FPA section 205 and the Tariff by including the addback in the PJM Manuals. The rule of reason does not impose the level of specificity the Market Monitor would require, there was no need to modify the Tariff to create the addback, and the addback's inclusion in the PJM Manuals was fully justified under the rule of reason.

Under the rule of reason, utilities only need file those practices "that affect rates and service *significantly*, that are realistically susceptible of specification, and that are not so generally understood in any contractual arrangement as to render recitation superfluous."[32] The Commission

[30] Complaint at 7.

[31] *See id.* at 7-8.

[32] *Keyspan Ravenswood, LLC v. FERC*, 474 F.3d 804, 811 (D.C. Cir. 2007) (quoting *City of Cleveland v. FERC*, 773 F.2d 1368, 1376 (D.C. Cir. 1985) (emphasis in original).

and the courts have repeatedly emphasized the impossibility of setting forth every practice affecting rates.[33] As a result, since the rule's inception it has been understood that "there is an infinitude of practices affecting rates and service," and attempting to define them all in a tariff is neither practical nor optimal.[34] For this reason, "mere implementation details" may be included in business practice manuals without Commission approval.[35] "[E]ven specifiable practices that significantly affect rates need not be included if they are clearly implied by the tariff's express terms."[36] When applying the rule, the Commission does not follow "some absolute prescribed standard literally set forth in the statute and regulations, but . . . the minimum specificity that the Commission could reasonably require."[37]

The Market Monitor's overemphasis on the contents of the PJM Manuals distorts the purpose of the rule of reason, which is not itself concerned with what information is contained in an RTO's manuals, but rather what information is contained in an RTO's tariff.[38] Thus, the question is not whether the addback provisions contained in the PJM Manuals are important but

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[33] *See, e.g.*, *Hecate Energy Greene Cty. 3 LLC v. FERC*, 72 F.4th 1307, 1312 (D.C. Cir. 2023) (quoting *City of Cleveland*, 773 F.2d at 1370 ("[I]t is no more possible to set forth all of the practices affecting rates . . . than it is to set forth all of the terms and conditions of a contract, leaving nothing whatever to be implied."); *Midcontinent Indep. Sys. Operator, Inc.*, 158 FERC ¶ 61,003, at P 69 (2017).

[34] *City of Cleveland*, 773 F.2d at 1376.

[35] *Hecate*, 72 F.4th at 1312; *PJM Interconnection, L.L.C.*, 186 FERC ¶ 61,080, at P 53 (2024).

[36] *Hecate*, 72 F.4th at 1314 (citing *City of Cleveland*, 773 F.2d at 1376).

[37] *City of Cleveland*, 773 F.2d at 1376.

[38] *See, e.g.*, *N.Y. Indep. Sys. Operator, Inc.*, 170 FERC ¶ 61,051, at P 12 (2020) ("[T]he Commission found that the Services Tariff contains sufficient information regarding the determination of LCRs to satisfy the requirement that practices significantly affecting rates and services be filed with the Commission and that the 'rule of reason' does not require NYISO to make further revisions to the Services Tariff."); *Hecate*, 72 F.4th at 1313 ("Because the Tariff gave Hecate fair notice that nonjurisdictional projects would be used in the base case, the Tariff included all 'practices … affecting … rates,' as required by the Federal Power Act.").

whether the Tariff is "detailed enough" to provide sufficient notice that an addback for EE Resources could be applied.[39]

PJM's Tariff satisfies the level of necessary specificity. First, the RAA states that an EE Resource is a project "that is not reflected in the peak load forecast prepared for the Delivery Year for which the Energy Efficiency Resource is proposed."[40] The addback provision replicates this language.[41] When considering an amendment adding this same language to the RAA's definition of "Energy Efficiency Resource," PJM explained that the purpose of that specific language was to "prevent[] adverse reliability impact[s] of double-counting energy efficiency measures as a resource in an RPM auction (or FRR Capacity Plan) and again as a load forecast reduction."[42] By virtue of this provision, participants in PJM were aware that the defined rate would not permit a situation in which EE Resources would simultaneously be reflected both in the peak load forecasts used for RPM Auctions and as a Capacity Resource.

Once the Tariff makes clear that it will not permit double-counting, RAA Schedule 6, section L then outlines in great detail the procedures and methodologies governing the offering of EE Resources as Capacity Resources. Thus, the Tariff clearly outlines the terms significantly affecting the ultimate rate, i.e., the prohibition against EE Resources being double-counted. The Market Monitor overlooks this simple fact when it contends that the details for implementing the bar against double-counting—the addback—must also be included in the Tariff despite the fact that the addback is only one component of the Tariff's procedures governing the offering of EE Resources.

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[39] *Hecate*, 72 F.4th at 1312.

[40] RAA, Sched. 6 § L.1; Tariff, Attach. DD-1 § L.1.

[41] *See* PJM Manual 18 § 2.4.5.

[42] November 2015 Presentation at 6.

Second, Tariff Attachment DD, section 5.10(a) specifies that PJM has the ability to shift the VRR Curve "in accordance with the methodology specified in the PJM Manuals."[43] The Commission has accepted similar provisions in the Tariff that incorporate procedures "specified in the PJM Manuals," explain that this express incorporation does not require "further specificity" to comply with the filed rate doctrine or the "rule of reason."[44]

Because Market Participants were on notice that EE Resources would not be permitted to be both a load reducer and a capacity supplier in the same Delivery Year, the addback merely effectuates this concept and implements the rate design that the Tariff contemplates. Besides failing to show that the addback contradicts the Tariff, the Market Monitor has not borne its burden of demonstrating that the addback belongs in the Tariff and not the PJM Manuals.

2. The Addback Has Been Used For Nine Years Without any Party Objecting to Its Inclusion in the PJM Manuals, and the Commission has Acknowledged Its Operation as a PJM Manual Requirement

The Market Monitor was aware of the addback at the time of the addback's adoption in 2015 yet has demonstrated no urgency in challenging it until now, roughly nine years later. In 2021, the Market Monitor made a presentation that stated "[t]he manual language should be rewritten to permit PJM to calculate the EE add back in the capacity market clearing such that the total EE add back MW offsets the total cleared EE MW in the BRA."[45] This Market Monitor proposal, in slightly modified form, was approved by PJM stakeholders for inclusion in Manual

[43] Tariff, Attach. DD § 5.10(a).

[44] *Big Sandy Peaker Plant, LLC*, 154 FERC ¶ 61,216, at PP 49-50 (2016).

[45] PJM Market Implementation Committee, *Energy Efficiency Addback – IMM Presentation* at 8 (Oct. 11, 2021).

18 in 2021.[46] The Complaint does not explain the Market Monitor's previous lack of concern about where the addback is described.

Moreover, the Commission has been aware, at least since 2017, of the role played by the addback in the RPM Auctions and that the addback was a feature of the PJM Manuals. *Advanced Energy Economy*,[47] a declaratory order proceeding involving PJM and Midcontinent Independent System Operator, Inc., addressed whether the Commission had exclusive jurisdiction over the participation of EE Resources in wholesale markets and whether relevant electric retail regulatory authorities had the authority to bar or restrict the sale into the wholesale electricity markets of EE Resources originating in their state or local area. One of the issues presented concerned the impact of PJM's addback on retail rates.[48] The orders in that proceeding clearly show that the Commission was aware of how the addback operated and that it was located in the PJM Manuals, stating:

> In December 2015, PJM implemented changes to its manuals, approved by stakeholders, to include an energy efficiency add-back mechanism. The mechanism aims to prevent double-counting EERs as both a supply-side resource and a load forecast reduction. Under the mechanism, PJM reconstitutes (i.e., adds-back) load reductions resulting from supply-side EERs to its forecasted demand curve. According to PJM, this add-back of EER capacity is necessary to ensure

[46] *See* PJM Markets and Reliability Committee, *Consent Agenda E, Executive Summary Manual Changes* at 1 (Oct. 20, 2021).

[47] *Advanced Energy Econ.*, 161 FERC ¶ 61,245.

[48] *See id.* P 41 ("AEE states that concerns regarding the potential for third-party EERs to impact load forecasting and resource adequacy planning appear to stem from PJM's decision in 2015 to include an 'add back' in its load forecast."); *id.* P 43 ("PJM Utilities respond that the compensation to third-party EER providers is funded directly by LSEs who have to pay for the grossed-up (i.e., mathematically derived 'load' that is added back in solely to generate revenues to compensate EER providers) load represented by EERs.").

> that sufficient quantities of non-EERs are procured to meet PJM's reliability standard.[49]

The use of an addback has not changed since 2017, and the Commission did not voice any concern over including the addback in the PJM Manuals at that time, nor did the Market Monitor.

3. The Addback is Consistent with the Definition of EE Resources Used in the RAA and PJM Tariff

The Market Monitor claims that the inclusion of the addback in the PJM Manuals violates the filed rate doctrine because "[t]he definition of EE resources explicitly includes only resources 'not reflected in the peak load forecast prepared for the Delivery Year for which the Energy Efficiency Resource is proposed.' Resources reflected in the peak load forecast are excluded."[50] According to the Market Monitor, "PJM cannot properly rely on manual provisions not included in the filed tariff when those provisions change the filed tariff rules as a basis to make payments to EE resources and to impose charges on PJM customers."[51] But the inclusion of the addback does not "change the tariff rules." It is fully consistent with them. Moreover, the Tariff expressly authorizes PJM to include the addback in the PJM Manuals.

First, as shown above, the Manual 18 and 18B provisions implementing the addback, which are appropriately incorporated in the PJM Manual under the Commission's "rule of reason," put all Market Participants fully on notice that the load forecast prepared by the PJM Load Forecasting group will be adjusted *before* final clearing occurs. Market Participants know before the auction starts that the load forecast amount prepared by the PJM Load Forecasting group will not be the

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[49] *Id.* P 7 n.15. The Commission acknowledged the approval by the PJM stakeholders of the PJM Manual 18 and 18B revisions implementing the addback at the December 17, 2015 Markets and Reliability Committee Meeting.

[50] Complaint at 7 (quoting RAA, Definitions, "Energy Efficiency Resource;" Tariff, Attach. DD-1, § L.1; RAA Sched. 6, § L.1).

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

load forecast used in the auction. Rather, the load forecast "prepared for the Delivery Year for which the EE Resource is proposed" is the load forecast that will result *after* the addback adjustment is made.[52] Stated otherwise, the auction is not finished until final clearing occurs, and the load forecast as adjusted by the addback is the load forecast "prepared" for that purpose. The EE Resources definition is not at odds with the addback in any respect.

Second, as discussed above, the PJM Tariff grants PJM the ability to shift the VRR Curve "in accordance with the methodology specified in the PJM Manuals."[53] That is precisely the role of the addback, i.e., to shift the VRR Curve to the right by the addback amount. That explicit authorization overcomes any filed rate doctrine objections.[54]

B. The Limitation of Claims Provisions in the Tariff and Operating Agreement Prohibit the Market Monitor's Expansive Request for Retroactive Relief

Because there is no basis for the Market Monitor's rule of reason argument, there is no basis for PJM to retroactively recoup nine years of payments to EE Resources as the Market Monitor requests. But even if PJM had violated the rule of reason, the Market Monitor's unbounded request for retroactive relief cannot lawfully be applied to any demand for retroactive relief extending beyond two years because the twin Limitation of Claims provisions in the PJM Tariff and Operating Agreement limit recoupment to a two-year period.

Section 10.4 of the Tariff and section 15.6 of the Operating Agreement both contain the following "Limitations of Claims" provision:

> No adjustment in the billing for any service, transaction, or charge under this Agreement may be asserted by PJM, PJM Settlement, or any Member or Participant with respect to a month, if *more than two years has elapsed since the first date upon which the billing for that month occurred*. PJM Settlement, on behalf of itself or

[52] Manual 18 § 2.4.5.

[53] *See* Tariff, Attach. DD, § 5.10(a) .

[54] *See, e.g.*, *Big Sandy Peaker Plant, LLC*, 154 FERC ¶ 61,216,at PP 49-50.

> as agent for PJM, may make no adjustment to a Member's or Participant's bill with respect to a month for any service, transaction, or charge under this Agreement, if more than two years have elapsed since the first date upon which the billing for that month occurred, unless 1) a claim made by a Member or Participant in writing and addressed to the President of PJM Settlement seeking such adjustment has been received by PJM Settlement prior thereto or 2) PJM and/or PJM Settlement have notified the Member or Participant in writing of the need to make such an adjustment prior thereto.[55]

As PJM has explained, "[t]he purpose of the [Limitation of Claims provision] is to provide certainty with respect to charges and credits assessed to market participants and transmission customers resulting from their participation in the PJM . . . Market[s] . . . and/or receipt of transmission service under the [PJM] Tariff."[56] These Limitations of Claims provisions are part of the filed rate, and federal courts have consistently upheld the validity of time bars on modifying past payments.[57]

C. It Would Violate the Filed Rate Doctrine to Immediately Cease Making Payments to EE Providers Absent a Commission Order

Finally, the Market Monitor's request for PJM to immediately cease making payments to EE Providers cannot be granted,[58] even if PJM ultimately revises its EE provisions, because the RAA specifies that "[i]f an Energy Efficiency Resource clears the auction, it shall receive the applicable Capacity Resource Clearing Price."[59] Thus, the filed rate doctrine requires PJM to pay

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[55] Tariff § 10.4 (emphasis added); OA § 15.6 (emphasis added).

[56] *PJM Interconnection, L.L.C.*, Docket No. ER06-1497, Transmittal Letter at 1 (Sept. 19, 2006).

[57] *See, e.g.*, *Seminole Elec. Coop., Inc. v. FERC*, 861 F.3d 230, 235 (D.C. Cir. 2017) ("FERC has been required to apply a contract provision that places time limits on claims challenging the "propriety" of bills to claims of Tariff violations.") (citing *Bos. Edison Co. v. FERC*, 856 F.2d 361, 371 (1st Cir. 1988)).

[58] *See* Complaint at 9 ("PJM should be directed to cease making payments to EE resources for energy efficiency that is included in its forecasts. . . .").

[59] RAA, Sched. 6, § L.3; *see also* PJM Manual 18 § 4.4 ("If cleared in an RPM Auction, a Capacity Performance EE Resource will receive a Capacity Performance Resource Clearing Price for the LDA in which the EE Resource resides.").

EE providers for EE Resources that have capacity commitments.[60] The Third Circuit has definitively held that an RTO cannot retroactively amend the inputs of its auctions, even through amendments to its tariff, once legal consequences attach.[61]

The Third Circuit rejected the Commission's orders allowing a newly-created auction rule to apply retroactively to an already-completed capacity auction on the basis that retroactively altering "the legal consequence attached to a past action" violated the filed rate doctrine.[62] In that case, PJM ran its auction for the 2024/2025 Delivery Year based on faulty assumptions for one PJM zone, resulting in a clearing price of $100 million over what would have occurred absent the error.[63] To correct the error, PJM sought the Commission's permission to amend the Tariff to allow a downward adjustment to the Tariff's Locational Deliverability Area ("LDA") Reliability Requirement, which the Commission approved.[64] The Third Circuit concluded that PJM's Tariff amendment violated the filed rate doctrine because it retroactively altered the legal consequence attached to a past action by allowing PJM to use a different LDA Reliability Requirement than the value originally set before the auction pursuant to the Tariff-driven schedule.[65] Per the Court, the "relevant [filed rate doctrine] inquiry is simply whether the Tariff Amendment alters the legal consequences attached to past actions"[66]

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[60] While PJM is required to pay capacity revenues to all committed EE Resources, PJM may assess Capacity Deficiency Charges, which are greater than the capacity revenues, if PJM determines that the final nominated EE value based on the Post Installation M&V reports are less than the committed EE quantity.

[61] *See PJM Power Providers Grp. v. FERC*, 96 F.4th 390 (3rd Cir. 2024).

[62] *See id.* at 399.

[63] *See id.* at 395-96.

[64] *See id.* at 396-97.

[65] *Id.* at 399.

[66] *Id.* at 400.

The Market Monitor's request for PJM to cease EE payments going forward would violate the filed rate doctrine for similar reasons, because "legal consequence attached to a past action"[67] before the Complaint was filed. Specifically, PJM approved the M&V Plans submitted by EE Resources, which must be submitted "[n]o later than 30 days prior to the auction in which the resource is to be offered."[68] Moreover, the 2025/2026 Base Residual Auction is now complete and PJM has already awarded capacity commitments to EE Resources. In short, the retroactive relief requested by the IMM for the 2025/2026 Base Residual Auction as well as any prior auctions would violate the filed rate doctrine.

III. MOTION FOR SUMMARY DISPOSITION

The Complaint is fatally flawed for reasons that demand summary disposition under Rule 217 of the Commission's Rules of Practice and Procedure. A motion for summary disposition should be granted when there is "no genuine issue" of material fact left in dispute.[69] Such is the case here for the Market Monitor's retrospective allegations.

There is no meaningful factual dispute regarding how the addback operates or how it came to be included in the PJM Manuals. The Market Monitor's claim that PJM should have sought Commission approval of the addback through an FPA section 205 filing can be fully addressed and summarily rejected based on a simple review of controlling Tariff language and by the application of the Commission's "rule of reason" test to those undisputed facts. Further, there is no factual dispute that an important, Commission-directed design element of RPM was to prevent "double-counting" of EE MW in calibrating the VRR Curve. The Market Monitor's claim that the

[67] *See id.* at 399.

[68] RAA Sched. 6, § L.2.

[69] 18 C.F.R. § 385.217(b).

addback is unjust, unreasonable, and unduly discriminatory may also be summarily rejected because PJM has demonstrated how the addback was needed to prevent "double counting" of EE MW after PJM's adoption of load forecasting enhancements in 2015.

IV. STATEMENTS PURSUANT TO 18 C.F.R. § 385.213(C)(2)

A. Admissions and Denials

Pursuant to 18 C.F.R. § 385.213(C)(2)(i), PJM affirms that any allegation in the Complaint that is not specifically and expressly admitted above is denied.[70]

B. Affirmative Defenses

Pursuant to 18 C.F.R. § 385.213(C)(2)(ii), PJM's affirmative defenses are in this Answer.

V. COMMUNICATIONS

PJM requests that the Commission place the following individuals on the official service list for this proceeding:[71]

Craig Glazer
Vice President–Federal Gov't Policy
PJM Interconnection
Suite 600
1200 G Street, N.W.
Washington, D.C. 20005
Tel. 202-423-4743
Craig.Glazer@pjm.com

Chenchao Lu
Associate General Counsel
PJM Interconnection, L.L.C.
2750 Monroe Blvd.
Norristown, PA, 19403-2429
Tel: (610) 666-2255
Fax: (610) 666-8211
chenchao.lu@pjm.com

John Lee Shepherd, Jr.
Kenneth R. Carretta
Blake Grow
Hunton Andrews Kurth LLP
2200 Pennsylvania Avenue, NW
Washington, D.C. 20037
Tel: (202) 955-1500
Fax: (202) 778-2201
jshepherd@hunton.com
kcarretta@hunton.com
bgrow@hunton.com

[70] *Id.* § 385.213(c)(2)(1).

[71] To the extent necessary, PJM requests a waiver of Commission Rule 203(b)(3), 18 C.F.R. § 385.203(b)(3) to permit more than two persons to be listed in the official service list for this proceeding.

VI. CONCLUSION

For the reasons set forth in this answer, the Commission should deny the Complaint and provide no relief.

Respectfully submitted,

/s/ John Lee Shepherd, Jr.

Craig Glazer
Vice President–Federal Government Policy
PJM Interconnection, L.L.C.
1200 G Street, N.W., Suite 600
Washington, D.C. 20005
(202) 423-4743 (phone)
craig.glazer@pjm.com

Chenchao Lu
Associate General Counsel
PJM Interconnection, L.L.C.
2750 Monroe Boulevard
Audubon, PA 19403
(610) 666-2255
Chenchao.Lu@pjm.com

John Lee Shepherd, Jr.
Kenneth R. Carretta
Blake Grow
Hunton Andrews Kurth LLP
2200 Pennsylvania Avenue, NW
Washington, DC 20037
(202) 419-2135
(202) 294-3914
(202) 955-1500
jshepherd@hunton.com
kcarretta@hunton.com
bgrow@hunton.com

July 31, 2024

CERTIFICATE OF SERVICE

I hereby certify that I have on this day caused to be served a copy of the foregoing upon all parties on the service list in these proceedings in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.2010 (2023).

/s/ Blake Grow

Blake Grow
Hunton Andrews Kurth LLP
2200 Pennsylvania Avenue, NW
Washington, DC 20037
(202) 955-1500
bgrow@hunton.com

EXHIBIT A
AFFIDAVIT OF ANDREW GLEDHILL

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Joint Consumer Advocates,	)	
	)	
v.	)	**Docket No. EL24-118-000**
	)	
PJM Interconnection, L.L.C.	)	

AFFIDAVIT OF ANDREW GLEDHILL ON BEHALF OF PJM INTERCONNECTION, L.L.C.

1. My name is Andrew Gledhill. My business address is 2750 Monroe Blvd., Audubon, Pennsylvania, 19403. I am Manager of the Resource Adequacy Planning department in the System Planning division of PJM Interconnection, L.L.C. ("PJM"). I am submitting this affidavit on behalf of PJM to explain how PJM prepares the peak load forecast used in RPM auctions and to explain why the Energy Efficiency Resource addback is needed to enable the Reliability Pricing Model ("RPM") to operate as designed to support resource adequacy on the PJM system.

Qualifications

2. I joined PJM in 2011. As Manager of the Resource Adequacy Planning department, I am responsible for overseeing long-term resource adequacy studies and production of the long-term load forecast ("PJM Load Forecast"). Prior to this role, my primary responsibility was the development and production of the PJM Load Forecast.

3. I hold a Bachelor of Science degree in Mathematics from the Pennsylvania State University and a Masters degree in Economics from the North Carolina State University.

Load Forecast

Overview

4. The PJM Load Forecast is an independent work product that produces a range of hourly and expected peaks over the next fifteen years under a range of historical weather conditions. The purpose of the PJM Load Forecast is to provide an accurate signal of expected load conditions, taking into consideration such factors as economic growth, distributed generation, electric vehicles, and equipment/appliance usage trends. This ultimately supports PJM planning and market functions.

5. The PJM Load Forecast is produced on an annual basis and involves methodological enhancements and input assumption updates to reflect evolving trends. Methodology and results are discussed and reviewed at various stages of the PJM Stakeholder process, primarily through the Load Analysis Subcommittee and Planning Committee. The PJM

Load Forecast methodology utilizes estimating practices that are widely employed within the utility industry.

6. The PJM Load Forecast is produced using a series of statistical models.[1] The process starts with three sector models: Residential, Commercial, and Industrial. PJM uses Sector models to incorporate independent assumptions on economic trends and end-use adoption and efficiency. Each sector has its own set of models and inputs, and these sector models result in a set of three end-use indices: Heat, Cool, and Other. These are zonal-calibrated measures that serve as the basis for understanding historical and forecast trends in weather-sensitive and non-weather-sensitive electric use.

7. The next stage is a series of 24 hourly regression models for each PJM zone. Each regression model has the same specifications, with load modeled against certain input variables, including Weather Variables, Calendar effects, and the end-use indices from the sector model process.

8. Once models are estimated, forecasts for each PJM transmission zone are produced by solving the hourly zonal equations, moving through the year on a daily and hourly basis, applying adjustments for historical weather patterns (including conditions for distributed solar generation), as well as load forecast adjustments (e.g., data centers and peak shaving), and adjustments for behind-the-meter battery storage and electric vehicles. To enhance the simulation process, each yearly weather pattern is shifted by each day of the week moving forward six days and backwards six days, providing 13 different weather scenarios for each historical year. For instance, in the 2024 PJM Load Forecast, the end result is that for every hour, there are 377 forecast scenarios related to weather variation (29 historical years times 13 scenarios).

9. For purposes of system planning or markets, these results will be processed to distill an expected median forecast (50th percentile) for a month, year, or season or an extreme value forecast (90th percentile). Some more recent developments in resource adequacy studies use the full forecast—all 8760 hours—and the full range of scenarios produced through weather simulation.

Model enhancements

10. Methodological enhancements need to be made frequently to acknowledge ongoing patterns and best align with actual load trends or anticipated factors. These enhancements have covered a range of different initiatives, including migration to an hourly model

[1] Details on the production of the PJM Load Forecast can be found in the Load Forecast Supplement. *See* PJM Resource Adequacy Planning Department, *2024 Load Forecast Supplement* (Jan. 2024), https://www.pjm.com/-/media/planning/res-adeq/load-forecast/load-forecast-supplement.ashx.

framework in 2022 and incorporation of end-use intensity trends in 2015. The latter was when PJM first made adjustments to explicitly account for energy efficiency trends in its PJM Load Forecast.

11. Prior to the 2015 enhancements that incorporated end-use intensity trends, PJM used a model in which the correlation of load with economic factors was the primary driver of movements in the forecast. Efficiency trends were captured implicitly, i.e., lower observed loads reflected the efficiency gains. This resulted in a lag for including energy efficiency impacts in the PJM Load Forecast. Because energy efficiency was only captured in the observed loads and the RPM auction was held three years prior to the Delivery Year, a four year lag would occur between when energy efficiency projects were installed and when they would appear in the load history used to produce the RPM load forecast for a given Delivery Year.

12. The current end-use intensity methodology does an effective job of accurately estimating energy efficiency impacts. An end-use intensity is the relative use over time of a technology considering its relative penetration or saturation and its relative efficiency. For example, all else held equal, the use or intensity of central air conditioning would increase if more people acquired central air conditioners and would decrease if those units were to become more efficient. Energy intensity values are derived from the EIA Annual Energy Outlook. These factors are captured in the above-described sector model evaluation.

13. Energy intensity values are used as variables in PJM's statistical models. These variables take into account growing efficiency, which is a further adjustment reflected in the model estimation and the final forecast.[2] This modeling technique has directly contributed to lower loads than would have otherwise been observed.

Addbacks

14. All demand-side resources, including Energy Efficiency Resources, have the potential to be counted either as reductions to load or as supply-side resources. Addbacks serve the purpose of avoiding a situation in which the Energy Efficiency Resource is counted *both* as a demand-side resource and as a supply side resource in the same Delivery Year, i.e., "double counting." The PJM Load Forecast serves as an input to the RPM. Since 2015, the PJM Load Forecast has been explicitly reduced by the enhancements for efficiency gains. But Energy Efficiency participates as a supply-side resource. Thus, an addback is

[2] In 2022, PJM engaged an outside consultant, Itron, to evaluate and provide consultation on load forecasting. Itron's report further explains the interaction of intensity variables and forecast modeling of efficiency impacts. *See* Itron Inc., *2022 PJM Model Review: Final Report* at 48-49, https://www.pjm.com/-/media/planning/res-adeq/load-forecast/pjm-model-review-final-report-from-itron.ashx (last visited July 9, 2024).

needed to assure that reliability will not be affected by counting the same Energy Efficiency Resources as both reducing demand and as supplying Capacity in the same Delivery Year.

15. Though computed in a different way, similar principles apply to active load management of Demand Resources. Under Manual 19, Attachment A,[3] there are established guidelines for calculation of estimated load drops for load curtailments. These load curtailments are re-constituted with our load history such that the loads being used to estimate our models are not already being reduced by resources seeking to participate as supply in RPM. This is consistent with the operation of the Energy Efficiency addback.

16. Having a resource both reduce demand and offer as supply, absent some form of addback, can create a potential reliability issue. This can be seen by considering recent auction results. The 2022 PJM Load Forecast issued January 2022 covered 2022 to 2037. That forecast was used as the basis for the 2024 RPM Base Residual Auction ("BRA") and planning parameters, projected a PJM summer peak load of 150,640 MW.[4] The cleared amount of Energy Efficiency in the 2024 BRA was 7,667 MW.[5] Absent an addback, the signal would have been that the market only needs to procure resources to serve 142,973 MW (150,640 MW original forecast less 7,667 MW cleared Energy Efficiency), effectively shifting the VRR Curve by 7,667 MW to the left on the x-axis. The most recent peak load forecast, which covered 2024 to 2039 and issued in connection with the Third Incremental Auction prepared for Delivery Year 2024/2025, was 151,631 MW.[6] This indicates that not applying the addback would have resulted in a reliability deficit of 8,658 MW (151,631 MW forecast less 142,973 MW implied reliability requirement if the addback was not used). In short, the addback is necessary to avoid double counting and creating a reliability issue.

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[3] *See* Manual 19: Load Forecasting & Analysis (Nov. 15, 2023), https://www.pjm.com/-/media/documents/manuals/m19.ashx.

[4] PJM, *2024-2025 RPM Base Residual Auction Planning Parameters* (May 8, 2024), https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2024-2025/2024-2025-rpm-bra-planning-parameters.ashx. The 2024-2025 RPM Base Residual Auction Planning Parameters used the 2022 Load Forecast covering 2022 to 2037. *See PJM Load Forecast Report: January 2022*, https://www.pjm.com/-/media/library/reports-notices/load-forecast/2022-load-report.ashx (last visited July 9, 2024).

[5] PJM, *2024/2025 RPM Base Residual Auction Results*, https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2024-2025/2024-2025-base-residual-auction-report.ashx (last visited July 9, 2024).

[6] PJM, *2024-2025 RPM Third Incremental Auction Planning Parameters* (last updated Feb. 1, 2024), https://www.pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2024-2025/2024-2025-3ia-planning-parameters.ashx. The 2024-2025 Third Incremental Auction Planning Parameters used the 2024 Load Forecast covering 2024 to 2039. *See PJM Load Forecast Report: January 2024*, https://www.pjm.com/-/media/library/reports-notices/load-forecast/2024-load-report.ashx (last visited July 9, 2024).

17. This concludes my affidavit.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Joint Consumer Advocates,	)	
	)	
v.	)	**Docket No. EL24-118-000**
	)	
PJM Interconnection, L.L.C.	)	

VERIFICATION OF ANDREW GLEDHILL

Andrew Gledhill, being first duly sworn, deposes and states that he is the Andrew Gledhill referred to in the foregoing document entitled "Affidavit of Andrew Gledhill," that he has read the same and is familiar with the contents thereof, and that the testimony set forth therein is true and correct to the best of his knowledge, information, and belief.

Signed and sworn to (or affirmed) before me on July 10, 2024 by [signature]

Commonwealth of Pennsylvania

County of Montgomery

[signature]

Commonwealth of Pennsylvania - Notary Seal
Jacqueline Cobb, Notary Public
Montgomery County
My commission expires December 20, 2027
Commission number 1291751
Member, Pennsylvania Association of Notaries

EXHIBIT B
SUPPLEMENTAL AFFIDAVIT OF ANDREW GLEDHILL

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Joint Consumer Advocates,	**)**	
	)	
v.	**)**	**Docket No. EL24-118-000**
	)	
PJM Interconnection, L.L.C.	**)**	

SUPPLEMENTAL AFFIDAVIT OF ANDREW GLEDHILL
ON BEHALF OF PJM INTERCONNECTION, L.L.C.

1. My name is Andrew Gledhill. My business address is 2750 Monroe Blvd., Audubon, Pennsylvania, 19403. I am Manager of the Resource Adequacy Planning department in the System Planning division of PJM Interconnection, L.L.C. ("PJM"). I previously submitted an affidavit in this matter as part of PJM's Answer filed on July 10, 2024 ("First Affidavit"). This affidavit supplements the First Affidavit by providing additional support for certain matters addressed there and also to address certain new claims made in intervenor comments.

2. In particular, I am responding to certain claims made by National Resource Defense Council ("NRDC") and others claiming that significant levels of Energy Efficiency ("EE") reductions are not being captured in PJM's load forecast such that cleared EE Resources in RPM Auctions regularly exceed load forecast estimates, and a related claim made by Sierra Club that PJM's load forecast methodology fails to take adequate account of State EE programs. Neither of these claims is accurate. Further, I show that NRDC's claim that certain Reliability Pricing Model ("RPM") sensitivity studies that show the impact of removing the addback assume double-counting of EE Resources that could create reliability impacts.

Qualifications

2. My qualifications are provided in my First Affidavit.

Supplemental Support for First Affidavit Regarding the Load Forecast Process

3. As explained in the First Affidavit, the PJM Load Forecast is produced on an annual basis and involves methodological enhancements and input assumption updates to reflect evolving trends. Methodology and results are discussed and reviewed at various stages of the PJM Stakeholder process, primarily through the Load Analysis Subcommittee and

Planning Committee.[1] One of the points I emphasized was that "[t]he PJM Load Forecast methodology utilizes estimating practices that are widely employed within the utility industry."[2] Expanding on that point, I wish to note that certain other Independent System Operators and Regional Transmission Organizations use similar techniques as PJM. Many of PJM's techniques are broadly used in electric demand forecasting. PJM is not unique in taking advantage of statistical modeling to forecast long-term electric demand.

4. In order to promote continuous improvement of its processes, PJM regularly seeks stakeholder feedback regarding the load forecast. Methodology and results are discussed and reviewed at various stages of the PJM Stakeholder process, primarily through the Load Analysis Subcommittee and Planning Committee. Further, PJM engages with outside consultants for the purpose of identifying potential enhancements of the load forecast process. For example, PJM commissioned a report issued in 2022 regarding the load forecast process from Itron, Inc. that reviewed PJM's then-current forecast models and provided recommendations for enhancements.[3] Among other matters, the Itron Report addressed issues identified by market participants regarding the process for capturing the impacts of EE programs.[4]

Whether the Load Forecast Captures the MW Reductions Associated with EE Resources That Clear in PJM

5. One of the claims made by NRDC and other intervenors is that EE Resources that clear in RPM auctions are being significantly "overaccredited" compared with the EE MW reductions that are captured in the load forecast.[5] Further, NRDC claims that RPM sensitivity studies that showed the impact of adding 3,000 MW to 6,000 MW to the bottom of the supply curve for the RPM Auction covering the 2023/2024 delivery year "provide[] an indication of the order of magnitude" on RPM clearing prices that would be associated with the elimination of the addback. I strongly disagree with the suggestion that the load forecast could systematically be missing between 3,000 MW and 6,000 MW of EE reductions.

6. My First Affidavit discussed at length how PJM prepares its load forecast. I explained that PJM uses rigorous statistical techniques and procures data from reliable sources to

[1] First Affidavit at ¶ 5.

[2] *Id.*

[3] *See* 2022 PJM Model Review, Final Report ("Itron Report"), https://www.pjm.com/-/media/planning/res-adeq/load-forecast/pjm-model-review-final-report-from-itron.ashx.

[4] *See id*. at 46-48.

[5] NRDC Comments at 8.

complete the load forecast studies[6] The suggestion that PJM is systematically missing between 3,000 MW and 6,000 MW of EE reductions occurring within its footprint is recklessly inaccurate. An error of that magnitude could only happen if PJM's processes or data sources were seriously compromised. There is no reason to believe that to be the case; nor did the Itron Report identify any such failures. Further, if PJM's processes were as flawed as NRDC contends, there would be significant reductions when comparing longer term forecasts and shorter term forecasts. However, as shown in the First Affidavit, the most recent load forecasts for Delivery Year 2024/2025 used for the Third Incremental RPM Auction are actually higher than the older forecast for Delivery Year 2024/2025 used for the Base Residual Auction.

7. Statistical analysis strongly supports the inference that the EE embedded in the forecast exceeds what clears or is offered in the Capacity Market. The Reliability Assurance Agreement defines an Energy Efficiency Resource as "more efficient devices or equipment or implementation of more efficient processes or systems…exceeding then-current building codes, appliance standards, or other relevant standards."[7] The adoption of these more-efficient devices is occurring and is reflected in historical loads, and this behavior is expected to continue. In fact, the pre-calibrated EIA data assumes that at minimum, standards will be met,[8] and the calibration of these trends in statistical models further reinforces this point.[9]

8. The possibility that the EE Resources bidding into the RPM Auctions could exceed the EE embedded in the forecast is remote. For that to occur, there would need to be a significant bias in the process that goes undetected for an extended period. In addition, not all EE measures occurring within PJM are qualified to be EE Resources within RPM. Taking all these factors into account, the possibility that EE Resources offered into RPM Auctions would exceed EE embedded in the forecast by a material amount is remote. If it ever occurred, it would be an extreme outlier. NRDC's claims, and the similar claims made by other intervenors, are simply unsustainable.

9. In addition, a related claim made by Sierra Club is that PJM does not "account for state and utility efficiency programs by mapping regional EE program expenditures to end

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[6] *See* First Affidavit at ¶¶ 4-9.

[7] RAA, Sched. 6, § L.1; *accord* Tariff, Attach. DD-1, § L.1.

[8] For instance, the EIA Annual Energy Outlook Residential Demand Module Assumptions, at 6 (https://www.eia.gov/outlooks/aeo/assumptions/pdf/RDM_Assumptions.pdf) states: "In any given year, several equipment options of varying efficiency are available: minimum standard, some intermediate or ENERGY STAR® level, and highest efficiency."

[9] *See* First Affidavit at ¶ 6 (discussing Residential, Commercial, and Industrial sector models); *see id.* at ¶ 7 (discussing hourly regression models.).

uses."[10] PJM's process does not track individual EE programs but, contrary to Sierra Club's insinuations, it does reasonably capture the impacts of state and utility EE programs. The EIA data used by PJM incorporates information about many of these programs. In addition, the Statistically Adjusted End-Use models used by PJM provide inputs that aid in grasping these impacts.

NRDC's Reliance on the RPM Sensitivity Studies as a Proxy for Demonstrating the Elimination of the Addback Assumes Double-Counting of EE Resources

10. The PJM Auction for the 2023/2024 Delivery Year cleared 5,471 MW of EE Resources. The failure of the load forecast to capture 3,000 MW to 6,000 MW of EE impact, as NRDC claims, thus would be between about 50% and more than 100% of the cleared EE MW. NRDC asserts that it would be proper to clear the market without including these quantities in an addback.

11. The only justification for not including these quantities in an addback would be if the EE-driven load reductions in the load forecast were grossly underestimated. But, as I have shown, that is not a realistic possibility. NRDC is thus simply proposing to double count 50% to 100 % of the EE Resources that cleared—once as load reducers in the load forecast and a second time as supply sources in RPM. As I showed in the First Affidavit, this could create a significant reliability issue.[11]

12. This concludes my supplemental affidavit.

[10] Sierra Club Comments at 4 (quoting Independent Market Monitor, EE Education at 16 (Jan. 10, 2024),availableathttps://pjm.com/-/media/committees-groups/committees/mic/2024/20240110/20240110-item-06a---energy-efficiency-education---imm.ashx.).

[11] First Affidavit at ¶ 16.

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VERIFICATION OF ANDREW GLEDHILL

Andrew Gledhill, being first duly sworn, deposes and states that he is the Andrew Gledhill referred to in the foregoing document entitled "Affidavit of Andrew Gledhill," that he has read the same and is familiar with the contents thereof, and that the testimony set forth therein is true and correct to the best of his knowledge, information, and belief.

/s/ Andrew Gledhill
Andrew Gledhill