



COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
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March 13, 2025

By Electronic Filing

Honorable Debbie-Anne A. Reese, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

**Re: Comments of the Pennsylvania Public Utility Commission; Docket
No. ER25-1357**

Dear Acting Secretary Reese:

Please find for e-filing the Pennsylvania Public Utility Commission's Comments to PJM Interconnection, LLC's Proposal for Revised Price Cap and Price Floor for the 2026/2027 and 2027/2028 Delivery Years, and Request for a Waiver of the 60-Days' Notice Requirement to Allow for a March 31, 2025, Effective Date at Docket No. ER25-1357. Copies of this document have been served upon all parties designated on the Commission's official service list, in accordance with Rule 2010 of the Commission's Rules of Practice and Procedure.

If you have any questions, please do not hesitate to contact me.

Respectfully submitted,

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

PJM Interconnection, L.L.C.

Docket No. ER25-1357-000

COMMENTS OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION

Intervenor Pennsylvania Public Utility Commission (PA PUC) by and through its counsel hereby submits the following comments¹ regarding PJM Interconnection, LLC's (PJM) Proposal for Revised Price Cap and Price Floor for the 2026/2027 and 2027/2028 Delivery Years, and Request for a Waiver of the 60-Days' Notice Requirement to Allow for a March 31, 2025, Effective Date (Proposal). PA PUC supports PJM imposing a temporary price ceiling of approximately \$325/MW-day in Unforced Capacity (UCAP) and does not oppose the proposed temporary price floor of approximately \$175/MW-day UCAP to be applied to the upcoming Reliability Pricing Model (RPM) Auctions for the 2026/2027 and 2027/2028 Delivery Years.² These values are based upon an assumed accreditation of a dual fuel Combustion-Turbine (CT) of 79%, which appears to be a reasonable estimate at this time. However, we note that the cap and floor are dependent

¹ PA PUC submits these comments pursuant to 18 C.F.R. § 385.602(f) (2020).

² *PJM Interconnection, L.L.C.*, Docket No. ER25-1357, Proposal for Revised Price Cap and Price Floor for the 2026/2027 and 2027/2028 Delivery Years, and Request for a Waiver of the 60-Days' Notice Requirement to Allow for a March 31, 2025, Effective Date (Feb. 20, 2025).

upon effective load carrying capability (ELCC) for the dual fuel reference resource that has yet to be determined. The cap and floor would apply to all zones in PJM including constrained zones. Any resource that bids in over the cap of approximately \$325/MW-day UCAP will not clear.

PJM's proposal mitigates against the probability of prices reaching the otherwise anticipated price cap of approximately \$500/MW-day UCAP in the upcoming 2026/2027 and 2027/2028 RPM Auctions due to insufficient competitive generation entering the interconnection queue in time to reach commercial operation for capacity commitment obligations. PJM's proposal removes uncertainty over the 2026/2027 and 2027/2028 RPM Auctions, avoids the risk of potentially significant further RPM Auction delays, and avoids the risk of future RPM Auction results wherein high clearing prices may be subject to refund. PJM's proposal is likely to protect consumers within PJM, including Pennsylvania consumers, via a lower price cap. PJM's proposal also supports the need for near-term investment by setting the cap above Net CONE and represents a two-year compromise with future changes in CONE to be addressed in the upcoming Quadrennial Review. Additionally, PA PUC favors maintaining the current auction schedule and does not oppose PJM's request for an effective date of March 31, 2025.

I. Background

Prior to 2011, PJM set the maximum price of the Variable Resource Requirement (VRR) curve to 1.5 times Net CONE. Subsequently, in its 2011 Triennial VRR Review, PJM proposed to alter the maximum price by "set[ting] the highest point on the VRR Curve equal to the greater of gross CONE or 1.5 times Net CONE to avoid potential

collapse of the curve when historic energy revenues used to determine the EAS offset are high.”³

In its 2022 Quadrennial Review Filing before FERC, PJM, in relevant part, proposed to modify the VRR curve by increasing the Net CONE multiplier from 1.5 to 1.75 for the 2026/2027 Delivery Year, thereby modifying the formula for determining the VRR curve price cap to the greater of gross CONE or 1.75 times Net CONE (noting that gross CONE may still set the price cap if it is greater than the multiple of Net CONE).⁴ PJM based its proposal on the *PJM CONE 2026/2027 Report* prepared by The Brattle Group.⁵ As justification for this change, PJM cited to: (1) higher uncertainty in the Net CONE estimate and rapid turnover in the capacity fleet caused by environmental policies, technological changes, and the retirement of aging plants; (2) large uncertainties in expected gas market prices (and consequently, in electricity prices and revenues from Net Energy and Ancillary Services (EAS) offsets); (3) ongoing uncertainties and instabilities in commodity markets, labor markets, supply chains, and financial stress across many sectors which have introduced challenges in estimating an accurate CONE estimate; and (4) the effects of state and federal policies on the design of the Reference Resource and fleet turnover, including indirect effects on the EAS offset.⁶ PJM also cited to global

³ *PJM Interconnection, L.L.C.*, Docket No. ER12-513-000 (filed December 1, 2011) (2011 Triennial VRR Review Filing), at 2.

⁴ *PJM Interconnection, L.L.C.*, Docket No. ER22-2284-000, *Periodic Review of Variable Resource Requirement Curve Shape and Key Parameters* (filed September 30, 2022) (2022 Quadrennial Review Filing) at 17.

⁵ *PJM CONE 2026/2027 Report* (2022 CONE Report) can be found at: <https://www.brattle.com/wp-content/uploads/2022/05/PJM-CONE-2026-27-Report.pdf>

⁶ 2022 Quadrennial Review Filing at 17.

natural gas shortages caused by Russia's invasion of Ukraine in February 2022 as potentially altering market conditions between the relevant RPM Auction and the 2026/2027 delivery year.

Under these circumstances, PJM took the position that adhering to the existing price cap incorporating the 1.5 times Net CONE multiplier would risk under-estimating Net CONE. Accordingly, PJM asserted that increasing the Net CONE multiplier to 1.75 would mitigate the risk of under-procuring.⁷ FERC approved PJM's proposed OATT revisions by Order issued February 14, 2023.⁸

In June 2024, the 2025/2026 BRA was conducted with the prior rate cap of 1.5 times Net CONE multiplier still in effect. Even at this lower price cap, the 2025/2026 BRA resulted in a capacity price of \$269.92 per megawatt-day (MW-day) for the PJM footprint, representing an almost 10-fold increase over the previous capacity auction for the 2024/25 delivery year, where PJM capacity prices cleared at \$28.92/MW-day. Accordingly, total capacity costs to PJM members rose from \$2.2 billion for the 2024/2025 delivery year to \$14.7 billion for the 2025/2026 delivery year.

On December 30, 2024, Pennsylvania's Governor Josh Shapiro filed a Complaint⁹ against PJM requesting that the Commission find PJM's existing capacity market cap to be unjust and unreasonable and to order PJM to redefine its capacity auction market cap

⁷ 2022 Quadrennial Review Filing at 17.

⁸ *PJM Interconnection, L.L.C.*, Docket No. ER22-2284-000, (Order entered February 14, 2023) (2022 Quadrennial Review Order).

⁹ *Governor Josh Shapiro and the Commonwealth of Pennsylvania v. PJM Interconnection, L.L.C.*, Docket No. EL25-46-000, Complaint of Governor Josh Shapiro and the Commonwealth of Pennsylvania (Dec. 30, 2024) ("Complaint").

until the next Quadrennial Review period. Governor Shapiro argued that the current price cap on the RPM demand curve, which takes the greater of the gross CONE or 1.75 times Net CONE, is too high and would result in total costs beyond what is necessary to maintain resource adequacy. The complaint seeks to lower the price cap to 1.5 times Net CONE. PA PUC submitted comments in support of the Complaint on January 21, 2025.¹⁰

On February 20, 2025, PJM filed the instant proposal. On the same date, PJM and Governor Shapiro also filed a stipulation of satisfaction and joint motion to dismiss the Complaint pending FERC's acceptance of the instant proposal.¹¹

II. PJM's Proposal is Just and Reasonable

The instant proposal before the Commission agreed upon by Governor Shapiro and PJM addresses PA PUC's immediate concerns by mitigating price increases in the 2026/2027 and 2027/2028 RPM Auctions that will inevitably increase the energy prices for Pennsylvania as well as regional end-use customers. However, it is important that the changes to the market design parameters are temporary measures, as future power supply issues cannot be ignored. Although the leap in capacity prices for the 2025/2026 delivery year is not something we wish to see repeated, the long-term solution must be an increase in supply driven by market signals.

¹⁰ *Governor Josh Shapiro and the Commonwealth of Pennsylvania v. PJM Interconnection, LLC*, EL25-46-000, Comments of the Pennsylvania Public Utility Commission dated January 21, 2025.

¹¹ *Shapiro v. PJM Interconnection, L.L.C.*, Docket No. EL25-46-000, Stipulation of Satisfaction and Joint Motion to Dismiss Complaint of PJM Interconnection, L.L.C., Governor Josh Shapiro, and the Commonwealth of Pennsylvania (Feb. 14, 2025).

III. PJM’s Load Forecast Has Changed Dramatically Since the 2022 Quadrennial Review

Whether PJM has met the just and reasonable standard is determined by whether the proposed demand curve “will attract sufficient generation to meet its capacity obligations at a just and reasonable price.”¹² As PJM has explained, and as Governor Shapiro noted in his initial Complaint, electrification mandates and the rapid growth of data centers within the PJM footprint are driving increases in PJM’s load forecast.¹³ In particular, Governor Shapiro notes that Peak load for 2027 is now forecasted to be approximately 8,000 MW higher than was anticipated in 2022.¹⁴

For many years, PJM’s energy demand was flat or declining—but in the past two years, it has surged. Meanwhile, dispatchable baseload plants are retiring or shutting down, with little new generation replacing them, tightening supply. Until capacity market reforms take effect, approving this proposal is the just and necessary choice.

IV. PJM’s Backlogged Interconnection Queue and Compressed Auction Schedule Prevents Generation From Responding to Capacity Market Price Signals

PJM’s capacity auction is intended to (1) telegraph a price signal to the market and (2) to provide the “missing money”¹⁵ for existing generators to cover their fixed costs. Accordingly, the maximum price of the VRR Curve provides generators with information needed to determine whether it is economical for them to offer their units into the

¹² *PJM Interconnection, L.L.C.*, 119 FERC ¶ 61,318 at P 110 (quoting *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331, at P 82 (2006)).

¹³ See <https://insidelines.pjm.com/pjm-publishes-2024-long-term-load-forecast/>, and Shapiro Complaint at 14-15.

¹⁴ Shapiro Complaint at 15.

¹⁵ Shapiro Complaint at 7, n. 20.

capacity market. Periods of low demand and low capacity prices would ostensibly disincentivize less economic generation units from participating in the market. Conversely, increased load forecasts and high capacity prices would ordinarily incentivize more generation units to offer into the market. Despite the increased load forecast in the PJM footprint and the tenfold increase in the capacity clearing price from the 2025/2026 BRA, practically no new generation or reactivated generation has come online.

As Governor Shapiro observed, there are currently two barriers to capacity market entry. First, the compressed capacity auction schedule provides insufficient time for generators to respond to price signals. Ordinarily, PJM holds its capacity auctions three years in advance of the delivery year. However, PJM suspended its capacity auctions while FERC considered issues relating to the Minimum Offer Price Rule (MOPR). Under normal procedures, the capacity auction for the 2025/2026 delivery year would have been held in Summer 2022. Instead, it was held in June of 2024 – approximately one year before the start of the 2025/2026 delivery year, and the same one-year advance timeframe will apply to the capacity auction for the 2026/2027 delivery year.¹⁶ This is simply not enough time for new generation to be developed, receive approval through the PJM Interconnection Queue (Queue), be constructed, and placed into service for the forthcoming delivery year.

¹⁶ PJM originally proposed to hold the 2026/2027 BRA in December 2024 – one year in advance of the 2026/2027 delivery year. On November 8, 2024, FERC approved PJM’s request to delay this auction to June 2025 – again, six months in advance of the 2026/2027 delivery year.

V. The VRR Curve Maximum Price For the 2026/2027 and 2027/2028 BRAs Should Be Adjusted

Another purpose of the maximum price on the VRR Curve is to represent the maximum amount that end-use customers are willing to pay for the system. Simply put, a reliable system is very valuable to Pennsylvania consumers, but they are not willing to pay prices drastically above those needed to maintain reliability in the long term, even in a single delivery year. Given that the price signals from the capacity market are not fully functioning to incentivize the entry of new generation, it is imperative that PJM take effective measures to mitigate against higher prices in the forthcoming capacity auctions. Otherwise, any additional capacity price increases would only serve to provide excessive and unreasonable compensation to existing generation. Accordingly, PA PUC agrees with the proposal that essentially lowers the Net CONE multiplier back to 1.5 of Net CONE rather than raising it to 1.75 of Net CONE, and removes Gross CONE as part of the price cap formula.

The purpose of the capacity market is to ensure that resources can recoup all of their costs that are not covered by the energy and ancillary services (EAS) markets. The capacity market allows generators to offer their capacity at a price lower than their going forward costs by factoring in EAS revenues (a concept colloquially known as the “missing money”). This is why Net CONE is defined as Gross CONE minus EAS markets revenues.

However, different types of generation vary to the extent that they rely on EAS markets revenues. As indicated by the Independent Market Monitor (IMM), EAS

markets revenues for a combined cycle (CC) plant make up about 85% of Gross CONE – meaning that for a CC, Net CONE is approximately 15% of Gross CONE.¹⁷ By comparison, EAS markets revenues for a combustion turbine (CT) plant make up only 51% of Gross CONE – meaning that for a CT, Net CONE is about 49% of Gross CONE.¹⁸ This distinction is relevant as to why the Net CONE multiplier for the VRR curve price cap should be changed if the reference resource is changed.

Upon approving the change to the VRR curve price cap proposed in PJM’s 2022 Quadrennial Review Filing, FERC took note of PJM’s view that that increasing the Net CONE multiplier for setting the price cap would be unlikely to affect the VRR Curve based on estimates finding that Gross CONE exceeds both 1.5 times and 1.75 times Net CONE, and the price cap therefore would equal Gross CONE regardless of the Net CONE multiplier.¹⁹ However this statement was made based on use of a CC plant as the reference resource for the RPM.

The IMM’s comments at Docket No. ER25-682-000 show the financial impact of applying the 1.75 Net CONE multiplier to the capacity market using CT as the reference resource.

Use of the 1.75 multiplier makes the $1.75 * \text{Net CONE}$ value much closer to Gross CONE and actually significantly greater (35 percent) than Gross CONE in some [local delivery areas (LDAs)]. PJM does not address the reasons for using a value greater than Gross CONE, let alone support such values.²⁰

¹⁷ *PJM Interconnection, L.L.C.*, Docket No. ER25-682-000, Comments of the Independent Market Monitor (Filed January 1, 2025), at 22.

¹⁸ *Id.*

¹⁹ 2022 Quadrennial Review Order at 62, n. 331.

²⁰ *PJM Interconnection, L.L.C.*, Docket No. ER25-682-000, Comments of the Independent Market Monitor (Filed January 1, 2025), at 21.

Based on current Gross CONE values for CT, using the 1.75 of Net CONE multiplier in one-third of LDAs in PJM's footprint (including PPL in Pennsylvania) would lead to prices greater than Gross CONE.²¹ In fact, under current market conditions, even using the 1.5 Net CONE multiplier for a CT reference results in values higher than Gross CONE in some LDAs. Under such circumstances, 1.75 * Net CONE still compensates resources to a degree far greater than their going forward costs, and even with a buffer for conservatism, this level of compensation is inimical to the purpose of the RPM. The Proposal results instead in a fully compensatory maximum price that will induce entry in the near term,²² while not tying customers to the injury of extraordinarily high capacity prices that serve no benefit. The instant proposal will act to protect consumers until the VRR Curve is addressed in the next Quadrennial Review.

²¹ *PJM Interconnection, L.L.C.*, Docket No. ER25-682-000, Comments of the Independent Market Monitor (Filed January 1, 2025), at 24, Table 1.

²² Since the 2025/2026 Base Residual Auction which cleared at a price below the Proposal's maximum price, 937.4 MW of dispatchable resources that had previously announced retirement withdrew their retirement announcements.

II. Conclusion

Therefore, for these aforementioned reasons, PA PUC respectfully requests the Commission accept and approve PJM's filing.

Respectfully submitted,

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Dated: March 13, 2025

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I am on this date serving a copy of the foregoing document upon each person designated on the official service list compiled by the Federal Energy Regulatory Commission in accordance with the requirements of Rule 2010 of the Commission’s Rules of Practice and Procedure.

Respectfully submitted,

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Dated: March 13, 2025