

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

PJM Interim Resource Adequacy Service and Large Load Registry	)))	Docket No. ER26-3515-000
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PROTEST OF PJM POWER PROVIDERS GROUP

PJM is at a critical moment in its history. Facing the challenges presented by the emergence of potentially significant new large demand and finding the market-based means of building the capacity to support the new growth will demand economically rational and structurally sound market design. Now is precisely the time that PJM and the Commission need to dedicate themselves to the proposition that a properly designed and well-functioning market will ultimately serve the consumers of the PJM region by providing reliability at the least cost.

Unfortunately, the interim resource adequacy service (“IRAS”)¹ and large load registry proposal (the “IRAS Proposal”) PJM has submitted represents an ill-conceived and unnecessary step away from PJM’s core principles and, perhaps more troubling, has long term implications for PJM’s capacity construct that may permanently scar it. PJM’s IRAS Proposal reflects an untested and unsupported, unjust, unreasonable and unduly discriminatory experiment with the nation’s largest power grid that has historically provided the consumers of the region with reliable service at competitive capacity prices. Astoundingly, PJM asks the

¹ PJM’s nomenclature of “interim” in the context of IRAS is misleading. PJM does not propose that the program sunset, but rather it is filed as a permanent program.

Commission to sanction this experiment with not as much as a *single* economist's or market design witness' testimony, analysis, study or supporting data.

The PJM Power Providers Group ("P3")² recognizes the pressure on the Commission and PJM to implement reforms to address the unprecedented load growth associated with New Large Loads and the potential price impact thereof on consumers.³ Unfortunately, however, the IRAS Proposal represents an abandonment of core tenets of the PJM capacity construct that will provide troubling messages to both new and existing capacity resources, jeopardizing reliability and resource adequacy, while raising the specter of litigation that is bound to interject further uncertainty at the very moment that certainty is paramount.

The IRAS Proposal cannot and should not be approved in accordance with Section 205 of the Federal Power Act ("FPA") as it is unjust, unreasonable and unduly discriminatory and preferential and will increase costs and undermine regional resource adequacy.⁴ For one, it explicitly is premised on the imposition of discriminatory treatment of certain classes of generators and certain types of customers, and the discrimination it proposes is undue. And second, PJM is

² P3 is a non-profit organization dedicated to advancing federal, state and regional policies that promote properly designed and well-functioning electricity markets in the PJM Interconnection, L.L.C. ("PJM") region. Combined, P3 members own over 108,000 MWs of generation assets and produce enough power to supply over 63 million homes in the PJM region covering 13 states and the District of Columbia. For more information on P3, visit www.p3powergroup.com.

³ The comments contained herein represent the position of P3 as an organization, but not necessarily the views of any particular member with respect to any issue.

⁴ 16 U.S.C. § 824d.

leagues away from having met its burden of proof to support the proposal. Third, the IRAS Proposal is facially inconsistent with both FPA Sections 201⁵ and 215,⁶ and also cannot be approved on that basis.

On the merits of a review of the soundness of IRAS as a market-design proposal, the IRAS Proposal must be rejected for a plethora of reasons, including:

- Put simply, IRAS sends the wrong incentives. It reflects bad market design policy, and impermissibly deviates from well-established precedent, because PJM seeks to remedy recently-experienced shortfalls in its Reliability Pricing Model (“RPM”) capacity procurement, counterintuitively, by artificially suppressing the price signals that are needed to incentivize the capacity PJM needs to remain in and enter into the market in order to cure the resource adequacy shortfall;
- It proposes to reduce reliability by intentionally under-procuring capacity. It is unsupported by evidence to warrant its fundamental restructuring of the RPM demand curve it proposes, given that the only filed affidavit – by Christopher Pilon – focused only on operations, not market analysis, price impacts, or loss-of-load expectation analysis. Specifically, there is no analysis of either the short or long-term implications of acting as if load that actually exists does not exist in the RPM process;
- IRAS dangerously degrades the regional reliability standard by treating IRAS as akin to accredited capacity when it is not, effectively changing the regional reliability criteria in the process, again without providing any support, let alone acknowledgment, of that effect and without addressing the consequences of such change. IRAS is an involuntary reduction of service and represents a degradation of reliability;
- IRAS is impermissibly vague as a rate filing because it depends on the outcome of state retail proceedings that may or may not ever occur and PJM cannot compel; and
- IRAS is an untested and unsupported experiment that seeks to inappropriately commandeer North American Electric Reliability Corporation (“NERC”) Reliability Standards that apply to the Bulk Electric System for use on the retail distribution system for which they

⁵ 16 U.S.C. § 824.

⁶ 16 U.S.C. § 824o.

were not designed, representing another way the proposal puts reliability at risk.

- If approved, the IRAS filing will have long-lasting implications for PJM's capacity construct, resource adequacy and costs that will not easily be rectified. Load on PJM's system will be eliminated from the Variable Resource Requirement ("VRR") Curve with no firm enforcement mechanism governing the satisfaction of that load's demand. This departs from the checks and balances associated with every other type of load reduction, which each are paired with enforceable obligations (e.g., Fixed Resource Requirement ("FRR"), Demand Resources, Price Responsive Demand, Peak Shaving Adjustments and behind-the-meter generation). This reduction of load unpaired with an enforceable obligation to procure sufficient capacity to meet the demand represents an incredibly dangerous and perhaps irreversible policy divergence from one of the PJM capacity market's core tenets.

I. PROTEST

A. The Federal Power Act Dictates Rejection of the IRAS Proposal

1. PJM Has Not Met Its Burden of Proof

Under FPA Section 205, the filing public utility proposing tariff revisions bears the burden of proof to demonstrate that its proposal is just, reasonable, and not unduly discriminatory or preferential.⁷ It is not the Commission's role to resolve the evidentiary gaps in order to develop the substantial evidence that would be required to accept a proposal that was inadequately supported when filed.⁸

⁷ 16 U.S.C. § 824d.

⁸ See *Sw. Power Pool, Inc. GridLiance High Plains LLC*, 180 FERC ¶ 61,192 at P 52 (2022) ("The party with the burden of proof bears the burden of production, or the need to provide sufficient evidence to establish a prima facie case"); see also, e.g., *Nantahala Power & Light Co. v. FERC*, 727 F.2d 1342, 1351 (4th Cir. 1984) ("*Nantahala*") ("A utility bears the burden of justifying each component of" a proposed rate change and "[b]ecause a regulated utility is the party with access to the necessary information, it bears the risk of an undeveloped or inconclusive record"); *Nw. Corp. v. FERC*, 884 F.3d 1176, 1182-83 (D.C. Cir. 2018) (explaining that "because it was [the utility's] burden under Section 205 to show that its proposed rate was just and reasonable, [] failure [to do so] was fatal" and rejecting arguments that it was FERC's burden to identify alternative bases for finding the proposed rate just and reasonable); *Advanced Energy Mgmt. All. v. FERC*, 860 F.3d 656, 662 (D.C. Cir. 2017) (explaining, in the context of the Section 205 burden of proof, that "[w]hen acting

Rather, the Commission routinely rejects Section 205 filings when the filing utility fails to meet its burden of proof,⁹ and it is most critical that it do so here, because of the substantial and fundamental negative consequences and market design flaws endemic to the IRAS Proposal. As described herein, PJM has not come close to satisfying this burden and, as such, the Commission should reject the IRAS proposal for that reason alone.

Notably, PJM relies on a single affidavit as the evidentiary support for its entire ground-breaking IRAS Proposal: the affidavit of Christopher Pilog, its Senior Director of Operations Planning.¹⁰ That affidavit addresses only operational issues, including emergency procedures and dispatch sequencing.¹¹ At the IRAS Proposal's peril,¹² and confoundingly given the import of the proposal, PJM opted

on a public utility's rate filing under section 205, the Commission undertakes 'an essentially passive and reactive role' and restricts itself to evaluating the confined proposal").

⁹ *Midcontinent Independent System Operator, Inc.*, 191 FERC ¶ 61,131 at P 197 (2025) (rejecting tariff revisions where filer failed to meet Section 205 burden show approach for addressing resource adequacy and reliability needs was just and reasonable and not unduly discriminatory or preferential); *PJM Interconnection, L.L.C.*, 180 FERC ¶ 61,089 at PP 47, 51 (2022) (rejecting PJM tariff revisions because PJM failed to meet Section 205 burden to show proposal was just and reasonable), *order on reh'g*, 181 FERC ¶ 61,191 at P 15 n.49 (2022) (stating "PJM bears the burden of proof to show that the . . . proposal is just and reasonable") (citing 16 U.S.C. § 824d(e); *Nw. Corp. v. FERC*, 884 F.3d 1176, 1182 (D.C. Cir. 2018); *Panda Stonewall LLC*, Opinion No. 574, 174 FERC ¶ 61,266 at P 30 (2021)); *PJM Interconnection, L.L.C.*, 168 FERC ¶ 61,133 at P 25 (2019) (rejecting filing where Section 205 burden was not met).

¹⁰ PJM IRAS Proposal, Attachment C, Affidavit of Christopher Pilog on Behalf of PJM Interconnection, L.L.C. ("Pilog Aff.").

¹¹ PJM IRAS Proposal, Transmittal Letter ("PJM Transmittal Letter") at 76; Att. C.

¹² See *Nw. Corp.*, 884 F.3d at 1182 ("because it was [the utility's] burden under Section 205 to show that its proposed rate was just and reasonable, [] failure [to do so] was fatal"); see also *Nantahala*, 727 F.2d at 1351 ("[b]ecause a regulated utility is the party with access to the necessary information, it bears the risk of an undeveloped or inconclusive record"). FERC cannot accept the proposal in the absence of evidence demonstrating that it is just and reasonable. See, e.g., *N. States Power Co. (Minnesota) v. FERC*, 30 F.3d 177, 180 (D.C. Cir. 1994) ("the Commission must be able to demonstrate that it has 'made a

not to provide the evidentiary support of any economist or market-design witness. As a consequence, among other things, PJM failed to quantify the clearing-price effect on costs and resource adequacy of excluding New Large Loads that do not Bring Your Own New Capacity (“BYONC”) from the VRR curve, provided no analysis of the resource adequacy or cost effect of the decade of mandated \$0/MW-Day offers its proposal would impose, omitted a loss-of-load-expectation study or any explanation as to the effect its proposal would have on its long-held and widely accepted loss-of-load expectations and whether any change thereof is just or reasonable, and neglected to estimate the MW volumes that would be excluded from the VRR curve.

While PJM's burden to carry would not differ if its IRAS Proposal had substantial stakeholder support, PJM's omissions of evidentiary support as to market design, economic merit and reliability are even more glaring given that the IRAS Proposal in fact did not have widespread stakeholder support, as PJM concedes that all of the “proposals regarding the concepts addressed by IRAS failed to achieve two-thirds stakeholder support.”¹³

As relevant to the burden of proof that PJM bears and that the Commission must hold PJM to meeting, Attachment DD, Section 5.10(a)(iii) of PJM's Tariff requires that any review of the VRR Curve be grounded in simulations of market conditions establishing, on a probabilistic basis, that the curve will procure

reasoned decision based upon substantial evidence in the record”); *see also Emera Maine v. FERC*, 854 F.3d 9, 28 (D.C. Cir. 2017) (rejecting FERC's ROE where FERC “failed to explain how any evidence demonstrated that” the proposed rate was just and reasonable).

¹³ PJM Transmittal Letter at 16.

sufficient capacity to meet reliability requirements while supporting investment in new resources.¹⁴ PJM has honored that requirement in conducting its quadrennial reviews, retaining independent consultants and submitting Monte Carlo simulation and loss-of-load-expectation modeling in support of changes to the curve's shape.¹⁵ And the Commission has expressly relied on that rigorous analysis to support its orders accepting these VRR Curve adjustments.¹⁶ Here, in contrast to its actions in the periodic review, PJM proposes to alter the quantity on which every

¹⁴ PJM, Intra-PJM Tariffs, OATT, Attach. DD, § 5.10(a)(iii), states, in part:

iii) Procedure for ongoing review of Variable Resource Requirement Curve shape.

Beginning with the Delivery Year that commences June 1, 2018, and continuing no later than for every fourth Delivery Year thereafter, the Office of the Interconnection shall perform a review of the shape of the Variable Resource Requirement Curve, as established by the requirements of the foregoing subsection. Such analysis shall be based on simulation of market conditions to quantify the ability of the market to invest in new Capacity Resources and to meet the applicable reliability requirements on a probabilistic basis. Based on the results of such review, PJM shall prepare a recommendation to either modify or retain the existing Variable Resource Requirement Curve shape. . . .

¹⁵ PJM's filing in Docket No. ER26-455, in which a mere 1.5% change to the foot of the VRR Curve was proposed, was supported by both The Brattle Group and Sargent & Lundy. *See PJM Interconnection, L.L.C.*, 194 FERC ¶ 61,049 (2026). Despite the expert support and small size of the change, the Commission in that case correctly put PJM through the paces, adjudicating the propriety of the model's project timeline, variable operations and maintenance estimates, depreciation schedule, and more, relying heavily on a Brattle study and other evidence filed by PJM. Here, in contrast, where the consequences of the change are in a whole other league to the tiny 1.5% curve shift proposed in the sixth quadrennial review, PJM gives the Commission nothing to support the VRR Curve change presented in its proposal.

¹⁶ *PJM Interconnection, L.L.C.*, 194 FERC ¶ 61,049 at PP 11, 45 (2026) (finding that "the analysis on which PJM relies to support its proposed VRR Curve is consistent with the Tariff requirements" because "the analysis on which PJM relies to support its proposed VRR Curve is consistent with the requirements of the Tariff and results in adjustments to the VRR Curve that are just and reasonable. As part of the 2025 Periodic Review, PJM's consultant, Brattle, tested the performance and reliability of potential VRR Curves by using historical-based Monte Carlo modeling, a probabilistic analysis methodology"), *reh'g denied*, 194 FERC ¶ 62,139 (2026).

point of the VRR Curve is anchored, a change that bears on procurement adequacy at least as directly as a change in the curve's slope, while submitting no simulation, no probabilistic analysis, no loss-of-load-expectation study (or even consideration of loss-of-load impacts), no sensitivity analysis, no related independent expert testimony, and no estimate of the MW quantity that will be excluded for the Base Residual Auction ("BRA") by the IRAS Proposal. PJM does not explain why a modification of this consequence warrants less analytical support than its Tariff demands for a modification of the curve's shape in a quadrennial review, and the Commission would be shirking its regulatory responsibilities were it to accept such consequential changes without the important data such modeling and analysis would provide, especially in the face of meaningful evidence that the IRAS Proposal, if implemented, would exacerbate resource adequacy issues in PJM and result in increased costs overall. The Commission cannot accept this filing without departing from the standards, and rigorous evidence requirements, it just recently required to justify a change to the VRR Curve and departing from troves of well-established precedent.

2. The Commission Cannot Cure the Defects in the IRAS Proposal by Accepting It Subject to Condition; Rejection is its Only Option.

In an acknowledgement of the controversy surrounding its IRAS Proposal, PJM preemptively provided notice in the filing that it would consent to the Commission's use of authority to modify or sever portions of the proposed Open Access Transmission Tariff ("Tariff") and Reliability Assurance Agreement ("RAA")

changes in the proposal, if deemed necessary and appropriate under FPA Section 205 and if consistent with PJM's overarching objectives.¹⁷

The Commission cannot condition acceptance on modifications to the IRAS Proposal, however, as FPA Section 205 limits the Commission to a "passive and reactive role"¹⁸ and the relevant precedents disallow modifications to a filed proposal where the modification would transform the proposal into an entirely different rate design.¹⁹ The defects requiring correction in the IRAS Proposal are substantial and pervasive and would run afoul of the permitted "minor" modifications precedents permit. Moreover, the consent to Commission alterations that PJM granted in the filing itself is extremely circumscribed and insufficient to allow the proposal's major defects to be cured.²⁰

In *NRG*, the Court of Appeals for the D.C. Circuit acted on a PJM Section 205 capacity market filing in a situation similar to the one the Commission confronts here. PJM had filed a package of revisions to the Minimum Offer Price Rule, parts

¹⁷ PJM Transmittal Letter at 9.

¹⁸ *NRG Power Mktg., LLC v. FERC*, 862 F.3d 108, 114 (D.C. Cir. 2017) ("*NRG*") (quoting *Advanced Energy Mgmt. All. v. FERC*, 860 F.3d 656, 662 (D.C. Cir. 2017)).

¹⁹ *City of Winnfield v. FERC*, 744 F.2d 871, 875-876 (D.C. Cir. 1984) (indicating that the Commission cannot insert original notions of the rate because doing so would stray from its essentially passive and reactive role); *W. Res., Inc. v. FERC*, 9 F.3d 1568, 1578 (D.C. Cir. 1993) (precluding the Commission from adopting remedies "methodologically distinct" from what was initially proposed). While *Western Resources* arose under NGA section 4, the NGA has been determined to be "substantially identical" to FPA section 205 as to the applicability of this precedent. See, e.g., *FPC v. Sierra Pacific Power Co.*, 350 U.S. 348, 350 (1956).

²⁰ *NRG Power Mktg., LLC v. FERC*, 862 F.3d 108, 116 (D.C. Cir. 2017) (finding that PJM's consent to FERC's modifications of its Section 205 filing was inadequate to cure the harm, because consent only cures "minor" Commission-suggested changes and does not excuse modifications that create "an entirely new rate scheme," which deprive customers of adequate notice and opportunity to comment).

of which the Commission determined not just and reasonable. As a result, the Commission proposed modifications it believed would cure the deficiency, and accepted the filing as so modified, obtaining PJM's consent.²¹ The D.C. Circuit nonetheless vacated, holding that "Section 205 does not allow FERC to make modifications to a proposal that transform the proposal into an entirely new rate of FERC's own making," and that the Commission's modifications had produced an "entirely different rate design" than both PJM's proposal and PJM's prior rate scheme.²² The Commission had "in essence approved 'only half of a proposed rate.'"²³

Here, as discussed further *infra*, rehabilitating the PJM rate proposal would require, *inter alia*, removing PJM's proposed exclusion of load from the VRR Curve, excluding the ten-year price taker mandate, and allowing existing capacity to compete on equal footing to new capacity in PJM's BYONC scheme. Fundamental changes of such magnitude would neither be consistent with the Commission's reactionary role under *NRG*, nor fall within the circumscribed consent to changes PJM provided.

²¹ *Id.* at 114.

²² *Id.* at 110, 115-16.

²³ *Id.* at 116 (quoting *W. Res.*, 9 F.3d at 1579).

B. PJM's Proposal Would Inappropriately Stifle Supply from Responding to the Resource Adequacy Challenge

1. For the VRR Curve Development Only, PJM Improperly Will Treat Load on the System as if it Doesn't Exist

Starting as of the 2029/2030 Delivery Year, PJM proposes to remove from both the Regional Transmission Organization ("RTO")-wide and Locational Deliverability Area ("LDA") VRR Curves the unforced capacity ("UCAP") of New Large Loads that do not BYONC or procure capacity in its newly-proposed and not-yet-approved Reliability Backstop Procurement ("RBP") auction, measured against the 2028/2029 BRA load forecast.²⁴ In other words, PJM seeks to erase load from the demand curve notwithstanding that the load actually exists on the system. PJM understands the load is actually on the system, and has not proposed that the required transmission or other required infrastructure need not be built to reliably serve this load, just that the load will not be included in the demand curve. Removing forecasted load from the quantity procured moves the Demand Curve to the left. Once the auction clears on a price-responsive segment, that reduction lowers the clearing price, which signals to existing supply that it should exit and to new supply that it should not invest.

As P3 Witness Carl Coscia concludes in the attached affidavit, PJM's IRAS Proposal is inconsistent with the design of RPM, which was developed to deliver the Net Cost of New Entry as revenue to a capacity resource on average over the asset's life in capacity revenue to supplement the revenues provided by the energy

²⁴ PJM Transmittal Letter at 109-114; proposed Tariff, Definitions – Excluded RTO New Large Load Amounts and Excluded LDA New Large Load Amounts.

and ancillary services markets.²⁵ RPM was to provide the missing money to attract and retain needed resources, yet PJM has not shown that the IRAS Proposal will not exacerbate the missing money problem. Mr. Coscia provides analysis indicating that clearing prices below the Net Cost of New Entry across successive Delivery Years are outcomes of this model change.²⁶ He indicates that RPM was adopted in the first place due to “a spike in announced retirements of units that nonetheless are needed for reliability,” and considering PJM’s warning that “generator revenues in PJM may not be adequate to sustain the investments needed to maintain reliability in all parts of the PJM region.”²⁷

Notwithstanding PJM’s historical experience and the Commission’s response acknowledging the importance of permitting an opportunity to recover the Net Cost of New Entry over time, Mr. Coscia concludes as follows:

If the filing is accepted, PJM will construct the 2029/2030 Demand Curve using the reduced procurement base. The reduction will recur as qualifying load enters the forecast and will apply whether or not PJM ultimately calls an Interim Resource Adequacy Service event. Under the scenarios examined, the immediate effect is a smaller procurement target and increased sensitivity to the location of supply relative to Point 1; after the collar expires, several modeled paths produce materially lower clearing prices than the most recent Net Cost of New Entry calculation published by PJM.²⁸

²⁵ Affidavit of Carl Coscia at ¶ 10 (“Coscia Aff.”).

²⁶ Coscia Aff. at ¶ 15.

²⁷ *Id.* (citing PJM Interconnection, L.L.C., Docket No. ER05-1410-000, Transmittal at 6 (Aug. 31, 2005)).

²⁸ Coscia Aff. at ¶ 18.

2. PJM’s VRR Curve Reset Will Cause Fewer Resources to Clear Despite its Need For Additional Resources to Meet Increasing Demand, Increasing Shortages and Leading to Increased Prices.

Mr. Coscia models the effect of the load exclusion subsumed in the IRAS Proposal on RPM clearing prices, showing that the capacity market clearing prices with the demand exclusion begin a downward trajectory, quickly leading to a >50% reduction in the clearing price by 2030/2031 in the modeled scenario regardless of PJM’s projected continuing needs for additional capacity (e.g., the modeled clearing price falls from the Point 1 price of \$554.72/MW-day to \$206.02/MW-day in 2030/2031 and to \$156.79/MW-day by 2032/2033):²⁹

Delivery Year	Without exclusion (\$/MW-day)	With exclusion (\$/MW-day)
2029/30	\$333.44	\$333.44
2030/31	\$554.72	\$206.02
2031/32	\$554.72	\$178.07
2032/33	\$554.72	\$156.79

Thus, while PJM has represented that it is entering the 2027/2028 Delivery Year short of capacity because load is growing faster than supply,³⁰ its solution counter-intuitively is to exacerbate the shortage it states it is seeking to remedy. At the same time, PJM has not provided, and cannot provide, evidence that the Cost of New Entry or the return on investment that investors require has

²⁹ *Id.* at ¶ 38.

³⁰ PJM Transmittal Letter at 21 (“PJM will enter the 2027/2028 Delivery Year short of sufficient capacity[,]” which PJM claims is due to, *inter alia*, an “unprecedented surge in data center load” resulting in “resource adequacy in the PJM service area [being] under significant stress”).

decreased. Thus, despite PJM having more load than it can serve reliably, the RPM auction post-IRAS would send the improper signal that existing resources whose offers exceed those depressed clearing prices and that therefore do not clear should exit the market. Similarly, the message will be sent that new resources that cannot be financially sustained at the depressed clearing prices should stay out, and resource adequacy will continue to suffer in the region. As a result of this effect on the RPM market, reliable service in PJM — even service to the “existing” load — will be degraded. This will force PJM to again engage in one or more out-of-market stop-gap measures to shore up resource adequacy for even adequate service to existing load, but as with its other out-of-market measures, the solutions will not be as efficient as those driven by the market and ultimately will be more costly for consumers in PJM.³¹

To be clear, the IRAS Proposal is not expected to lower consumer costs just because it may yield lower RPM BRA clearing prices. The feedback loop is explained by Mr. Coscia as follows: First, “[t]he Excluded Amount rises from 5,223 UCAP MW in 2029/2030 to 28,060 UCAP MW in 2032/2033, or from 3.5 percent to 16.4 percent of the Reliability Requirement before the subtraction.”³² Then, “load growth increases the system PJM must plan to serve; the Excluded Amount

³¹ For example, the Reliability Must Run (“RMR”) Agreements involving Brandon Shores and H.A. Wagner demonstrate the phenomenon PJM was trying to avoid when it proposed the RPM construct in 2005. Both facilities receive fixed payments under those RMR Agreements above the prevailing 2025/2026 capacity price of \$269.92/MW-day with fuel and Variable O&M reimbursed separately. And instead of a broad allocation, over 80% of those costs are borne directly by Maryland rate payers. *H.A. Wagner LLC et al.*, 191 FERC ¶ 61,098 *on reh’g*, 192 FERC ¶ 61,189 (2025).

³² Coscia Aff. at ¶ 67.

prevents a corresponding increase in what the Reliability Pricing Model procures; a reduced procurement quantity lowers the price signal for entry and retention; and a weaker investment signal can leave fewer resources available when the forecast load materializes.”³³ And this all occurs without any PJM analysis of the long-term resource adequacy impacts.

Mr. Coscia cites to PJM’s own words, and that of its expert witnesses who supported the introduction of RPM in the first place, showing that the IRAS Proposal is inconsistent with their statements of sound market design at the time. He explains:

Consumers may pay lower Reliability Pricing Model charges in the near term, but that reduction results from buying less capacity, not from a reduction in the resources needed to serve the load or in the cost of providing them. PJM made the connection between reserve levels and consumer costs when it originally proposed the model more than twenty years ago. It told the Commission that recognizing value in capacity above the reserve margin dampens volatility and allows “investors to make reasonable predictions of revenue streams,” which “reduces reserve and capacity price volatility and consequently the return required by investors resulting in savings in consumer costs.” PJM Interconnection, L.L.C., Docket Nos. ER05-1410-000 and EL05-148-000, Transmittal at 24 (Aug. 31, 2005). PJM added that “additional reserves due to the VRR curve result in lower capacity and energy costs to consumers,” and that “[e]xcess reserves also further reduce the probability of loss of load and discourage withholding by suppliers to increase profits.” *Id.* at 24-25. It supported that with a table showing capacity cost falling as the reserve level cleared higher, and explained that the capacity savings “will be augmented by energy cost savings” because, as both Mr. Ott and Professor Hobbs explained, “the commitment of capacity at a higher reserve level will tend to decrease energy market prices.” *Id.* at 74 (citing Ott Affidavit at 23-26). Reducing the reserves procured, as this filing proposes, should be expected to have the opposite result across each of those measures: a lower capacity charge, and higher energy

³³ *Id.*

costs, higher scarcity costs, and a higher probability of loss of load. The filing does not analyze that trade.³⁴

The IRAS Proposal would impose a market construct that is contrary to decades of well-established precedents providing that a just and reasonable market design must send appropriate price signals to encourage resource investment.³⁵ Under applicable law, the Commission cannot depart from such well-established precedent without providing reasoned analysis justifying such departure,³⁶ but PJM has utterly failed to provide the analysis the Commission would need to rely on.

Mr. Coscia tests PJM's assertion that its BYONC proposal represents a "symmetrical, one-for-one addition" and yields "an effectively price-neutral outcome."³⁷ He invalidates the assertion in several scenarios, showing that the

³⁴ *Id.* at ¶ 68.

³⁵ See, e.g., *PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,153, at P 221 (2020) (finding PJM's reserve market unjust and unreasonable in part because it did "not yield market prices that reasonably reflect the marginal cost of procuring necessary reserves, and thus does not send appropriate price signals for efficient resource investment"); *PJM Interconnection, L.L.C.*, 119 FERC ¶ 61,318, at P 51 (2007) ("[a]n important function in designing rates is to ensure that such rates provide sufficient incentive for the construction of infrastructure necessary to meet the needs of the system"); *Calpine Corp.*, 163 FERC ¶ 61,236, at P 65 (2018) (finding PJM's "Capacity Repricing" mechanism unjust and unreasonable because, by disconnecting price and quantity determination, it would "fail to provide a useful signal to market participants regarding whether a resource will clear the market or whether new entry or retirement is needed, jeopardizing the PJM capacity market's ability to ensure resource adequacy going forward"); *N.Y. Indep. Sys. Operator*, 103 FERC ¶ 61,201, at P 1 (2003) (accepting a tariff revision as just and reasonable because it "will provide better price signals to investors for the construction of new generation"). The Commission has stated that "accurate price signals are the link between current usage and future expansion." Regional Transmission Organizations, Order No. 2000, 65 Fed. Reg. 810, 910 (Jan. 6, 2000).

³⁶ *W. Deptford Energy, LLC v. FERC*, 766 F.3d 10, 17 (D.C. Cir. 2014) ("The Commission cannot depart from [its precedent] without 'provid[ing] a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored'").

³⁷ PJM Transmittal Letter at 58.

VRR Curve moves to the left as more load is excluded from it. Troublingly, he concludes that the asserted price-neutral outcome does not hold in numerous Tariff scenarios.³⁸ Mr. Coscia concludes:

The filed record does not establish whether the proposed changes will meet the objective of the design they modify: to provide, on average over an asset's useful life, the Net Cost of New Entry. PJM's filing does not identify the threshold at which the exclusion begins to affect price, provide a sensitivity around the Excluded Amount, evaluate the exclusion together with the zero-priced backstop supply available in the same auctions, or test the resulting price against Net Cost of New Entry — the figure PJM itself calculates to represent the cost of a new reference resource, and the anchor from which the Demand Curve's price coordinates are derived.

From an investor's standpoint, the range of outcomes introduces significant doubt as to whether there is an opportunity to recover the Net Cost of New Entry over time. Mr. Coscia explains that the range of outcomes:

depends on future supply, backstop participation, Bring Your Own New Capacity coverage, and the allocation of RBP UCAP MW. None of those inputs will be known when an investor commits capital. An investor financing a long-lived generating asset would reflect the resulting range of potential capacity revenues in its required return, in financing terms, or in both. That is the uncertainty PJM said the Reliability Pricing Model would remove: in 2005 PJM told the Commission that recognizing capacity value above the reserve margin would dampen volatility, "making estimates of future prices more reliable and allowing investors to make reasonable predictions of revenue streams," and would thereby "reduce[] . . . the return required by investors resulting in savings in consumer costs."³⁹

Over the longer term, Mr. Coscia explains that the PJM proposal results in a bifurcated capacity market wherein there is:

³⁸ Coscia Aff. at ¶¶ 53-58.

³⁹ Coscia Aff. at ¶ 62 (citing PJM Interconnection, L.L.C., Docket No. ER05-1410-000, Transmittal Letter at 24 (filed Aug. 31, 2005)).

load inside the Demand Curve, against which PJM procures capacity, and load outside it, which PJM plans and operates the system to serve but does not buy against. A market in which a substantial and growing share of load sits outside the mechanism designed to price reliability weakens the connection between the system PJM plans to operate and the capacity the model procures, with corresponding consequences for entry, retention and resource adequacy.⁴⁰

He explains:

The resource-adequacy effect reaches both entry and retention. A sustained price below the most recently posted Net Cost of New Entry benchmark weakens the signal for new investment. Lower expected capacity revenues may also affect retention, where an existing resource's expected market revenues no longer cover its going-forward costs. Measured against the Reliability Requirement before the exclusion, the modeled market is short in every Delivery Year examined, and Appendix A.5 shows the shortfall widening across the period. New generation becomes existing generation, so the same market design reaches a resource first as a new entrant and later as an existing unit: capacity supporting a Bring Your Own New Capacity arrangement offers as a price taker for ten Delivery Years and then competes as merchant capacity, and backstop capacity does so for fifteen. The modeled price reduction is therefore not merely a redistribution of capacity-market revenues between sellers and buyers. It is the means by which the reduced procurement target reaches decisions to build, finance, retain or retire the resources PJM continues to rely on to serve the full load forecast.⁴¹

The counter-intuitive nature of what PJM has proposed in relation to what it states its proposal seeks to accomplish may explain why PJM was unable to find a market-design witness to sponsor the IRAS Proposal. As a result, the filing leaves the answers to critical questions unanswered. Mr. Coscia provides examples:

PJM derives the Forecast Pool Requirement from the full load forecast and applies it to a load basis from which the Excluded Amount has been removed. PJM does not show that the planning

⁴⁰ Coscia Aff. at ¶ 19.

⁴¹ Coscia Aff. at ¶ 63.

parameters are inert to that removal. The question is whether the reliability model would solve to the same Installed Reserve Margin, the same ELCC Class Ratings and the same pool-wide factor if the excluded load were taken out of the load scenarios.⁴²

Because of unanswered questions like these, the Commission has no option but to reject the IRAS Proposal. It would be facially arbitrary and capricious to accept a proposal requesting action inconsistent with the proposal's own proffered justification.⁴³

3. PJM's VRR Curve Reset is Fundamentally Flawed.

The exclusion of this load from the VRR Curve is not conditioned on the existence of a capacity shortfall, or on whether any load reduction is ever called. Beginning with the 2029/2030 Delivery Year, the curve is proposed to be reduced in every Delivery Year, in an amount recalculated annually against a fixed 2028/2029 baseline. IRAS, by contrast, is available only in Delivery Years with a shortfall measured after the Third Incremental Auction, and only up to that shortfall. Thus, in any Delivery Year without a shortfall, the demand curve is reduced while no curtailments will be triggered.

⁴² Coscia Aff. at ¶ 82.

⁴³ *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (agency must articulate a rational connection between facts found and choice made); *World Shipping Council v. Fed. Mar. Comm'n*, 152 F.4th 215, 223-224 (D.C. Cir. 2025) (vacating portion of a Federal Maritime Commission rule that was inconsistent with the rule's central logic); see also *Ameren Servs. Co. v. FERC*, 880 F.3d 571, 582 (D.C. Cir. 2018) (remanding portion of FERC order for failure to demonstrate how it would address the alleged discrimination it sought to remedy).

Per the IRAS Proposal, in a Delivery Year with no capacity shortfall, IRAS won't be invoked,⁴⁴ but the VRR Curve will still be reduced. And adding further injury still, even in years when IRAS is invoked, the MW quantity taken out of the VRR Curve is likely to exceed the MW quantity interruptible under IRAS because, as PJM admits, IRAS is available only in Delivery Years in which a PJM Region Reliability Requirement shortfall exists following the Third Incremental Auction, and only up to that shortfall.⁴⁵ The MWs removed from the curve therefore are primed to exceed the MWs PJM can actually interrupt.⁴⁶ PJM offers zero analysis as to the quantity of the MWs it will exclude from the VRR Curve versus the MWs that it actually expects will be interrupted in any particular Delivery Year.

PJM asserts that its treatment of New Large Loads causes no harm, because such loads "are not expected to be indefinitely excluded" and since including them in the demand curve "is counterbalanced by the inclusion of a commensurate amount of additional Capacity Resources that are added to the supply curve," producing "an effectively price-neutral outcome for the rest of the market."⁴⁷ However, PJM's statements are only true as to those New Large Loads that arrive with BYONC. They are untrue as to the New Large Load that is excluded from the demand curve that does not have BYONC. For excluded load there is no

⁴⁴ PJM Transmittal Letter at 97 ("IRAS is only applicable in Delivery Years when New Large Loads without arrangements with new capacity give rise to a PJM Region Reliability Requirement shortfall").

⁴⁵ See PJM Transmittal Letter at 70-72; proposed Tariff, Attachment DD-4, section IV(b)(i)–(ii).

⁴⁶ Coscia Aff. at ¶¶ 106–07.

⁴⁷ PJM Transmittal Letter at 58, 115.

counterbalancing supply addition, no commensurate Capacity Resource, and no symmetry. The demand curve moves left against an unchanged supply curve, yielding a clearing price that should be expected to prompt the exit of existing resources and have a chilling effect on any new entry, given the lack of a path to recovering its capital investment. Capital will predictably flow away from electric generation into industries where positive returns rather than losses are contemplated.

Thus, at the same time PJM acknowledges the importance of hewing to market design fundamentals, it proposes to violate them. It requires that a BYONC resource not clear before its associated load is added to the demand curve, because otherwise “the RPM Auction would not reflect actual supply and demand fundamentals.”⁴⁸ But even though Excluded New Large Load remains interconnected, takes Network Integration Transmission Service, and consumes in every hour, PJM is unbothered by the departure from supply and demand fundamentals excluding its load represents. It provides no analysis of IRAS’ effect on long-term resource adequacy.⁴⁹ PJM is speaking out of both sides of its mouth. The Commission should not endorse the departure from market fundamentals the IRAS Proposal would memorialize.

⁴⁸ *Id.* at 115.

⁴⁹ *Coscia Aff.* at ¶ 67.

4. PJM Inappropriately Would Mandate BYONC Resources to Submit \$0/MW-Day Offers for 10 Years, Further Exacerbating Regional Resource Adequacy Concerns.

PJM proposes that each BYONC resource must offer as a price taker by expressly obligating them to make \$0/MW-Day offers in RPM Auctions for ten consecutive Delivery Years, during which they will be subject to a must-offer obligation and are precluded from obtaining an external-sale exception.⁵⁰ PJM reasons that “[b]ecause the resource is already obligated to provide the capacity, its incremental, going-forward avoidable costs to secure the RPM commitment are zero.”⁵¹ But there is no evidence to support the accuracy of PJM’s assumption, and absolutely nothing in the Tariff that assures the seller is made whole bilaterally. If a BYONC seller’s incremental costs exceed \$0/MW-Day, PJM will still require a \$0/MW-Day offer. While a cost-based BYONC seller’s offer might not clear, leaving the load’s demand in the curve and the price higher, PJM’s proposed mandatory \$0/MW-Day offer will by necessity clear and will suppress the clearing price, leading to increased resource adequacy issues. Generators whose offers exceed that clearing price will not clear, even if they would have cleared without the interference, and regardless of whether their capacity is needed to meet the true loads of the system.

⁵⁰ PJM Transmittal Letter at 55–58; proposed Tariff, Attachment DD-4, §§ VIII(b), VIII(e).

⁵¹ PJM Transmittal Letter at 57-58.

PJM's citations in support of the reasonableness of its assertions as to the propriety of a \$0/MW-Day offer in an auction are inapposite.⁵² They all relate to RMR-type situations, in which the seller has a contract that guarantees its cost recovery, and within the small subset of RMR sellers, specifically to those that are subject to a \$0/MW-Day offer requirement.⁵³ The discussion thus fails to apply to BYONC sellers, which do not have RMR protections. Regardless, PJM also misses that while any individual \$0/MW-Day offer requirement could be problematic for resource adequacy, the cumulative effect of \$0/MW-Day offers from RMR resources, RBP resources (as PJM proposes in pending Docket No. ER26-3380) and now BYONC will be devastating on resource adequacy in PJM.

These \$0/MW-Day offers are imposed by fiat rather than reflecting marginal cost like other offers subject to the Minimum Offer Price Rule, the Market Seller Offer Cap, unit-specific exemption procedures and the Independent Market Monitor's Tariff Attachment M review. In sum, whenever marginal costs exceed \$0/MW-Day, PJM will be mandating behavior by BYONC sellers that would be considered market manipulation or an exercise of buyer market power if attempted by other sellers.

⁵² PJM Transmittal Letter at 58 and n.153 (citing, *inter alia*, *PJM Interconnection, L.L.C.*, 190 FERC ¶ 61,088 at P 50; *Indep. Power Producers of N.Y. v. NYISO*, 150 FERC ¶ 61,214 (2015); and *ISO New England Inc.*, 165 FERC ¶ 61,202 at PP 82–88 (2018)).

⁵³ PJM interim provisions for certain RMR units through the 2027/2028 Delivery Year are set forth in section 4.2.8 of PJM Manual 18: PJM Capacity Market, Revision: 62, Effective December 17, 2025 at 68, available at <https://www.pjm.com/-/media/DotCom/documents/manuals/m18.ashx>.

C. PJM Improperly Proposes to Degrade the Regional Reliability Requirement

PJM proposes to establish the IRAS quantity to reflect the regional capacity shortfall that it measures after the Third Incremental Auction pertaining to a Delivery Year has occurred.⁵⁴ In other words, PJM will reduce the regional reliability requirement by the amount of the shortfall by relying on an expectation of load curtailment instead of continuing to seek to fulfil that reliability requirement with capacity. As Mr. Coscia explains:

From 2028/2029 through 2032/2033, peak load net of load in an FRR Service Area grows 31,026 MW while the Reliability Requirement net of the Excluded Amount changes by 584 UCAP MW. These are not equivalent reliability measures, but their divergence shows that the procurement target no longer moves proportionately with the load PJM must plan to serve. Excluding load of that magnitude from the Demand Curve, year after year, bears directly on the premise of the construct.⁵⁵

Therefore, while more demand is being placed on PJM's system during that time, PJM's Reliability Requirement is barely capturing any of it. Reduced reliability is baked into the IRAS Proposal, despite that PJM never acknowledges it is degrading reliability, let alone proves why that reliability reduction is just and reasonable.⁵⁶ Unlike PJM, P3 Witness Mr. Coscia analyzes the proposal's impact on winter risk, finding it increased between the Delivery Years analyzed.⁵⁷

⁵⁴ PJM Transmittal Letter at 70-72; proposed Tariff, Attachment DD-4, §§ IV(b)(i)–(iii), IV(c)(i)–(ii).

⁵⁵ Coscia Aff. at ¶ 11.

⁵⁶ *Id.* at ¶¶ 13, 27-35.

⁵⁷ *Id.* at ¶ 75.

Seasonal winter share of	2028/2029 BRA	2029/2030 BRA
Loss of load expectation	60.5%	77.9%
Loss of load hours	76.6%	89.4%
Expected unserved energy	90.2%	96.3%

The IRAS Proposal suffers from other fundamental flaws as well. First, unlike Demand Response Resources, IRAS is not offered into the auction and does not clear, it is not a tested resource category, and it is not subject to the stringent qualification, performance, penalty and other requirements of the Capacity Performance construct. Indeed, these stringent Capacity Performance requirements would apply to voluntary Demand Response before it could ever qualify to serve as a capacity resource. Nonetheless, PJM attempts to treat IRAS as accredited capacity when it is not subject to these strict checks and balances that apply to actual capacity, including Demand Response. Second, PJM concedes that while IRAS depends upon load reductions being implemented when Operating Instructions directing them issue, it is not directing any specific Load Serving Entity (“LSE”), any specific customer of an LSE, or any specific Large Load to reduce load. PJM is relying on Electric Distributors, states and other entities with which they coordinate to execute its wishes.⁵⁸

⁵⁸ PJM cites to model state tariffs under development in Virginia and by the Data Center Coalition. PJM Transmittal Letter at 87-89. Even the already-pending Virginia proposal, which is in the development stage, is not expected to be in place until February 1, 2027, whereas IRAS would go live on June 1, 2027. *Id.* Any state without an existing model in place that does not have a proceeding ongoing is unlikely to have a state tariff that is effective before the IRAS’ proposed implementation date. And states are not obliged to proceed with any such state rules, in any event.

In addition, PJM is beholden to state retail programs it concedes have yet to be developed and it cannot compel to be developed. The stool that PJM seeks to build has no legs without the buy-in of thirteen states and the District of Columbia on critical underpinnings to the proposal. Through the Organization of PJM States, Inc. (“OPSI”) those fourteen jurisdictions previously told the PJM Board of Managers of their concerns with what has now been filed as the IRAS Proposal. OPSI stated, *inter alia*:

- “PJM’s updated proposal declines to address the region’s current resource adequacy challenges at the regional level”;
- “[T]he proposal functionally eliminates the incentive for [New Large Loads] to bring new capacity”;
- The “approach is likely to lead to a patchwork of regulatory responses that could lead to more reliability events in the future and makes it more likely that existing residential and commercial loads will be subject to curtailment. . .”; and
- The “proposal leaves important cost containment and cost assignment concerns unaddressed”.⁵⁹

The Commission cannot find a rate construct so reliant on state buy-in, and to which PJM’s member states have expressed reservations and not unanimously agreed, to be just and reasonable.⁶⁰

Third, as is discussed elsewhere *infra*, PJM opted not to support its filing with a loss of load study. Yet its proposed change to the curtailable load on the

⁵⁹ Statement of OPSI to the PJM Board of Managers at the June 30, 2026 Critical Issue Fast Path Meeting, available at <https://opsi.us/wp-content/uploads/2026/06/OPSI-RBP-CM-Verbal-Remarks.pdf>.

⁶⁰ See *Delaware Div. of Pub. Advoc. v. FERC*, 3 F.4th 461, 469 (D.C. Cir. 2021) (holding FERC could not rely on an assumption, without record evidence, that an optional market rule would actually be utilized as envisioned, particularly where there was evidence to the contrary).

system changes the loss of load expectation (“LOLE”). Despite that change, PJM did not, in turn, explicitly seek to change the reliability criteria set forth in the RAA.⁶¹ While PJM has not explicitly stated that the IRAS Proposal changes the regional reliability criteria, the proposal produces that result through a tariff change. An alteration as significant as a reduction to the reliability criteria cannot proceed without supporting record evidence that is absent from the IRAS Proposal.⁶²

A contrast to PJM’s FRR construct highlights a dangerous dichotomy. In the IRAS Proposal, PJM does not extend IRAS to New Large Loads in FRR Service Areas.⁶³ It explains that its reason is that “FRR Entities must procure sufficient capacity for all their New Large Loads and include such in their FRR Capacity Plans” and reiterates that “the FRR Entity must add new capacity for any New Large Load in its territory.”⁶⁴ In its proposed RAA changes, PJM requires that the procurement for such loads must be from new capacity, stating an FRR Entity: “may not include in its FRR Capacity Plan any MW quantity of Existing Generation Capacity Resource in excess of what such FRR Entity owned or contracted . . .

⁶¹ PJM enumerates the RAA changes, see PJM Transmittal Letter at 3-6, and this is not among them.

⁶² See *supra* pp. 7–9 (discussing the type of evidence typically required for such changes); see also *PJM Interconnection, L.L.C.*, 194 FERC at PP 11, 45 (finding that “the analysis on which PJM relies to support its proposed VRR Curve is consistent with the Tariff requirements” because “[a]s part of the 2025 Periodic Review, PJM’s consultant, Brattle, tested the performance and reliability of potential VRR Curves by using historical-based Monte Carlo modeling, a probabilistic analysis methodology”), *reh’g denied*, 194 FERC ¶ 62,139 (2026).

⁶³ PJM Transmittal Letter at 73.

⁶⁴ *Id.*

prior to June 1, 2027, to serve New Large Load."⁶⁵ Thus, in an FRR area, the obligation to procure new capacity is enforceable, but outside such areas, it is not.

PJM has not justified this unduly discriminatory difference in treatment in FRR versus non-FRR areas. In fact, for other mechanisms that reduce load (Demand Resources, Price Responsive Demand, Peak Shaving Adjustments, and behind-the-meter generation) loads removed from PJM procurement are paired with enforceable obligations associated with the load reduction. PJM's departure from that guiding principle in the IRAS Proposal is unsupported, unjust and unreasonable, and unduly discriminatory.

D. PJM Seeks to Add Unduly Discriminatory Requirements to its Tariff Through IRAS

P3 understands that others are addressing the discriminatory nature of IRAS in more detail, but these points bear repeating because Section 205 of the FPA provides that discrimination may not be undue. Despite this restriction, the IRAS Proposal would memorialize unduly discriminatory treatment in a variety of ways, and accordingly cannot be accepted. At a high level, the proposal unduly discriminates because:

- PJM will favor new generation over existing generation, setting up a system of preferences based on the vintage of the generation resource. Yet both new and existing generation are capable of serving Large Loads.
- PJM would apply IRAS only to large load that connects after its proposed June 2027 cutoff date. Yet loads added to the system before and after that date place the same demands on the system in terms of the capacity, energy and ancillary services and transmission service they require.
- Section 202(g) of the FPA explicitly provides that in the case of an energy or capacity shortage, all public utility customers "will be treated, without

⁶⁵ Proposed RAA, Schedule 8.1 § D.1.1.

undue prejudice or disadvantage.”⁶⁶ Yet by establishing two classes of large loads, those served by BYONC, and those not served by BYONC, and codifying different treatment based on what class a large load falls within, PJM proposes the exact discriminatory treatment that FPA Section 202(g) explicitly forbids.

- IRAS reduces the load PJM will acquire capacity to serve in the auction but materially deviates, without adequate justification, from the other Tariff-sanctioned mechanisms that govern situations in which PJM may reduce acquired load. As Mr. Coscia details, IRAS reductions occur without the rigor or obligations imposed by the Fixed Resource Requirement Alternative, the Peak Shaving Adjustment, or Price Responsive Demand.⁶⁷

E. IRAS is too Indeterminate to be Found to be a Just and Reasonable Rate

Attachment DD-4 § X sets the IRAS rate at 50% of the Non-Performance Charge Rate except in the event that an Eligible New Large Load elects to accept less in its retail rates or waives compensation entirely. PJM admits that whether any given load is compensated “will be determined by state authorities under state law or [Relevant Electric Retail Regulatory Authority],” that implementation “relies on application of state retail law,” and that “the IRAS rate is intended to be conjoined with retail rates.”⁶⁸ PJM admits that the rate of compensation to Eligible New Large Loads under IRAS may be zero:

if states decline to act and Eligible New Large Loads decline to initiate regulatory proceedings to recover through retail rates the wholesale IRAS rate, they would effectively waive a right to compensation.⁶⁹

⁶⁶ 16 U.S.C. § 824a(g)(3)(B).

⁶⁷ Coscia Aff. at ¶¶ 96–102.

⁶⁸ PJM Transmittal Letter at 104, 106; see also proposed Tariff, Attachment DD-4, §§ X(a), X(b)(i), X(c).

⁶⁹ PJM Transmittal Letter at 107.

Thus, unlike a Demand Resource that would be compensated at a market clearing price, IRAS providers would receive different compensation (or in fact no compensation at all) based on the happenstance of where they are located. Mr. Coscia observes:

The filing does not separately analyze compensation for the recipient. It provides no estimate of a New Large Load's curtailment cost, no analysis of the value of the service provided, and no comparison between the rate and the capacity charges paid by the same load.⁷⁰

A federal program adopting such a scheme would institutionalize unduly discriminatory ratemaking treatment,⁷¹ or at least an indeterminate ratemaking treatment that Section 205 of the FPA does not abide and is also inconsistent with section 202(g).⁷² PJM is essentially creating a pool of resources that compete with generation suppliers in PJM that may be compensated at zero for the federally-compelled obligations to reduce capacity it seeks to implement. In fact, PJM's prioritization of interruptions of IRAS before Demand Response when IRAS is not

⁷⁰ Coscia Aff. at ¶ 120.

⁷¹ See 16 U.S.C. § 824d; see also *Consol. Edison Co. of N.Y. v. FERC*, 45 F.4th 265, 282 (D.C. Cir. 2022) ("undue discrimination occurs when similarly situated entities are charged different rates for no good reason"); *Dynegy Midwest Generation, Inc. v. FERC*, 633 F.3d 1122, 1127–28 (D.C. Cir. 2011) (holding unduly discriminatory an RTO tariff that permitted transmission owners to choose whether or not to compensate power generators for providing the same reactive power service depending on their location); *FPC v. Conway Corp.*, 426 U.S. 271, 277–82 (1976) (explaining that the Commission may consider relevant retail-rate circumstances when determining whether a jurisdictional wholesale rate is unduly discriminatory).

⁷² See 16 U.S.C. §§ 824d(c), 824a(g); see also, e.g., *Elec. Dist. No. 1 v. FERC*, 774 F.2d 490, 493 (D.C. Cir. 1985) ("[P]urchasers of electricity cannot plan their activities unless they know the cost of what they are receiving, 'providing the necessary predictability is the whole purpose of the well-established filed rate doctrine'"); *Transwestern Pipeline Co. v. FERC*, 897 F.2d 570, 577 (D.C. Cir. 1990) (the tariff must let purchasers "know in advance the consequences of the purchasing decisions they make").

subject to a similar accreditation process and may be uncompensated, unduly discriminates against the latter.

F. PJM Seeks to Use the Reliability Standards in a Way That FPA Section 215 Expressly Prohibits and is Reserved to the States by FPA Section 201(B)

1. PJM Already Has Authority to Direct Load Reductions, and Impermissibly Seeks to Extend that Authority to the Retail Level Through the IRAS Proposal

P3 does not contend that PJM lacks authority to direct load reduction. As Reliability Coordinator, PJM “shall act to address the reliability of its Reliability Coordinator Area via direct actions or by issuing Operating Instructions,” and each Transmission Operator, Balancing Authority, Generator Operator, and Distribution Provider “shall comply” with those Operating Instructions.⁷³ PJM, however, is seeking more than to confirm its authority to issue Operating Instructions that address load shed through the addition of its “Interim Resource Adequacy Service Action.”

Examining what proposed Attachment DD-4 adds to PJM’s existing authorities lays bare the retail nature of all the new actions and demonstrates why its IRAS Proposal treads on states’ jurisdiction in an impermissible manner.

IRAS Component	Retail Character of the Addition
Advance designation, by registry and class, of which retail customers are curtailed ⁷⁴	A retail service classification — a determination of what service the customer is buying

⁷³ NERC, Reliability Standard IRO-001-4, Requirements R1, R2, https://www.nerc.com/globalassets/standards/projects/technical-rationale/iro-001-4_clean_030723.pdf.

⁷⁴ PJM Transmittal Letter at 84 (quoting proposed Tariff, Definitions – Interim Resource Adequacy Service Action).

IRAS Component	Retail Character of the Addition
A standing priority placing those customers ahead of Pre-Emergency Load Management ⁷⁵	Priority of service among classes of retail customers
A trigger measured against a capacity shortfall after the Third Incremental Auction ⁷⁶	A planning-horizon resource adequacy instrument, not an operating directive
A compensation rate defined by what the customer accepts “in its retail rates”	A retail rate term
Indefinite duration, with no proposed end date ⁷⁷	A standing condition of retail service

The difference between what PJM already has the authority to do and what PJM proposes in the IRAS Proposal is retail regulation in its entirety.

2. PJM Concedes That It Cannot Compel the Load Reduction on Which the Proposal Depends.

PJM states that its Board directed a service “applicable to ‘[N]ew Large Loads that, as of June 1, 2027, do not bring sufficient capacity to serve their resource adequacy needs and cannot otherwise be served at the 1-in-10 reliability standard,’” with load reductions “occurring before deployment of Pre-Emergency Load Management.”⁷⁸ New Large Loads are retail customers. Whether and in what order a retail customer’s service is interrupted is determined by the states.

In particular, PJM acknowledges that “today Electric Distributors select, consistent with their state programs, which loads to reduce in response to a PJM

⁷⁵ *Id.* at 101 (IRAS called ahead of Demand Resources and DER Capacity Aggregation Resources).

⁷⁶ *Id.* at 70–72 (shortfall trigger and quantity).

⁷⁷ *Id.* at 72 (“PJM is not proposing an end date to the IRAS program.”)

⁷⁸ *Id.* at 17 (quoting the PJM Board’s July 2026 Decisional Letter).

load reduction directive,” that “PJM is not looking to change any existing approach,” and that “the manner in which an Electric Distributor reduces load is a function of their state-approved contracts and state-approved curtailment and load reduction plans.”⁷⁹ PJM states that “PJM will not direct specific LSEs and/or specific customers of LSEs—including specific Large Loads—to reduce their load and/or switch to on-site backup resources.”⁸⁰ PJM describes the reductions as occurring “under state curtailment priorities implementing IRAS at the retail level.”⁸¹

The remaining mechanisms of IRAS state they are elective on their face. The Large Load Registry supplies information that Electric Distributors and state entities “*may elect* to rely upon when fashioning such load reduction protocols.”⁸² IRAS would “facilitate a decision by an Electric Distributor in conjunction with relevant state entities.”⁸³ And it is “Electric Distributors, in coordination with the appropriate states and/or RERRAs, LSEs, and LSE customers” who “will determine which loads should ultimately reduce subject to IRAS.”⁸⁴ Finally, PJM anticipates that the operative determinations “would be worked out through revised state retail tariffs” and offers that “PJM stands ready to assist states in developing

⁷⁹ *Id.* at 85.

⁸⁰ *Id.* at 86–87.

⁸¹ *Id.* at 23.

⁸² *Id.* at 7 (emphasis added).

⁸³ *Id.*

⁸⁴ *Id.* at 26, 92.

those tariffs if they so desire.”⁸⁵ PJM cannot require that any such tariff be developed, and does not claim that it can.

PJM presents the foregoing as “cooperative federalism,” and P3 does not dispute that Electric Distributors and States should make retail curtailment decisions. The objection is narrower. Having conceded that the load reduction depends on decisions PJM does not control, PJM proceeds to treat that reduction as though it were assured: it calibrates the Eligible New Large Load Amount to a shortfall against the PJM Regional Reliability Requirement, and it deducts that amount from each of the three points on the VRR Curve beginning with the 2029/2030 Delivery Year.⁸⁶ The reduction in procurement is certain, recurring, and effective on PJM’s own motion. The resource offered in exchange is contingent on retail proceedings in thirteen States and the District of Columbia that have not occurred, under tariffs that do not yet exist, administered by regulators PJM concedes it cannot direct.

PJM’s premise is that the states will conform. But this premise is untested and there are good reasons states won’t conform. A state may reasonably decline to implement a retail curtailment priority that penalizes reliance on the existing generation fleet, as it may conclude that doing so would accelerate the retirement or exit of existing resources by threatening their economic viability and undermining investors’ expectations that any generation can serve any load,

⁸⁵ *Id.* at 87.

⁸⁶ *Id.* at 70–72, 109–114, 117–18; proposed Tariff, Attachment DD-4, §§ IV, V; *Id.*, Attachment DD, § 5.10(a)(i).

thereby exacerbating resource adequacy problems in the region. States understand that today's new generation is tomorrow's existing generation, and may object to the discriminatory two-class system that PJM proposes, understanding the negative signal it sends about long-lived generation assets' opportunity to recover their costs over their depreciable lives. A state may decline to disadvantage retail customers that have contracted with existing generation.

Under the proposed framework, a New Large Load that secures capacity from an existing resource remains an Eligible New Large Load and is exposed to curtailment, while an otherwise identical load that contracts for new capacity is not.⁸⁷ Yet it is beyond cavil that neither the FPA nor PJM can impose on states a requirement to prefer new capacity over existing capacity as a principle of retail service.

Further undermining the propriety of its proposal, PJM acknowledges that states need not accept even the threshold definition on which its proposed framework rests, recognizing that "states may each define 'large loads' differently for purposes of their retail tariffs, particularly those governing load reduction protocols."⁸⁸ One can see how tenuous PJM's proposal is upon considering that states don't even need to oblige on the most basic foundation of what a large load is, no less any of the more intrusive aspects of PJM's proposal.

⁸⁷ Proposed Tariff, Attachment DD-4, §§ VI(b)(i)–(ii); PJM Transmittal Letter at 52–55.

⁸⁸ PJM Transmittal Letter at 87.

3. The BYONC Alternative Does Not Avoid Load Interruptions

PJM represents that a New Large Load *may* “avoid facing potential load reduction under state curtailment priorities implementing IRAS at the retail level” by contracting for capacity satisfying the BYONC gating criteria.⁸⁹ It does not and cannot say that BYONC will avoid, or even receive a priority in avoiding, interruptions. Instead, an IRAS Action “will not be specific as to which New Large Loads would need to be reduced; rather, it will be based on the aggregate MW” of the Electric Distributor’s assignment.⁹⁰ PJM “will only direct load reduction of an aggregate MW IRAS within the zone or area.”⁹¹ The Electric Distributor decides who to curtail “consistent with their state programs” and “state-approved curtailment and load reduction plans.”⁹² That interruption priority need not be consistent with PJM’s preferences. Therefore, a New Large Load that contracts for ten years of new capacity that must offer at \$0/MW-Day obtains no assurance against curtailment and no guaranteed curtailment preference. Whether and what benefit the BYONC will provide is left to the state. Attachment DD-4 exempts no customers from emergency procedures, and PJM acknowledges that there will be times a BYONC load can contribute toward alleviating the emergency condition

⁸⁹ *Id.* at 23.

⁹⁰ *Id.* at 83–84.

⁹¹ Pilonig Aff. at ¶ 42; see also *id.* at ¶¶ 48–55; PJM Transmittal Letter at 82.

⁹² PJM Transmittal Letter at 85.

whereas the non-BYONC load cannot, such that the BYONC load should be interrupted.⁹³

PJM's entire scheme relies on the states obliging PJM's preferences. Its proposal is founded upon avoiding the burden of interruptions by using BYONC, but BYONC does not avoid the burden. The Commission cannot reach a decision grounded in solid market design principles on a hope and a prayer that the fourteen retail jurisdictions within PJM will oblige PJM's preferred outcomes.⁹⁴

4. PJM Seeks Authority not Granted in FPA Section 215

Section 215 defines the "Bulk-Power System" as facilities and control systems necessary for operating an interconnected transmission network, together with generation needed to maintain transmission system reliability, and provides that "[t]he term does not include facilities used in the local distribution of electric

⁹³ PJM considered a hypothetical situation in which an emergency occurred in the Dominion Zone and reasoned "[i]f load in a particular Electric Distributor zone/area is not negatively impacting transmission flows into the Dominion Zone, load reduction in that zone/area may not have any effect on the Dominion Zone." PJM Transmittal Letter at 82–83 (quoting Pilon Aff. at ¶ 53 (Example 3, AP South IROL scenario)).

⁹⁴ *Delaware Div. of Pub. Advoc. v. FERC*, 3 F.4th 461, 469 (D.C. Cir. 2021) (finding FERC's assumption, absent evidence, that an optional market mechanism would actually be used was arbitrary and capricious, particularly where evidence indicated its use would be contrary to economic interests). FERC has consistently held that market rules should be designed to incentivize investments in new generation and infrastructure needed for system reliability. See, e.g., *PJM Interconnection, L.L.C.*, 171 FERC ¶ 61,153, at P 221 (2020) (finding PJM's reserve market unjust and unreasonable in part because it did "not yield market prices that reasonably reflect the marginal cost of procuring necessary reserves, and thus does not send appropriate price signals for efficient resource investment"); *PJM Interconnection, L.L.C.*, 119 FERC ¶ 61,318, at P 51 (2007) ("[a]n important function in designing rates is to ensure that such rates provide sufficient incentive for the construction of infrastructure necessary to meet the needs of the system"); *N.Y. Indep. Sys. Operator*, 103 FERC ¶ 61,201, at P1 (2003) (accepting a tariff revision as just and reasonable because it "will provide better price signals to investors for the construction of new generation").

energy.”⁹⁵ The Electric Reliability Organization’s authority to develop and enforce reliability standards extends to “only the bulk-power system.”⁹⁶ The Reliability Coordinator (“RC”) may direct a quantity of load reduction at the transmission interface, but the RC’s existing authority does not extend to identifying the retail customers, served through distribution facilities, whose loads will be reduced.

Section 215 is explicit on this point:

This section does not authorize the ERO or the Commission to order the construction of additional generation or transmission capacity or to set and enforce compliance with standards for adequacy or safety of electric facilities or services.⁹⁷

Congress, in fact, included a savings clause in FPA Section 215 stressing that the provision not be interpreted as reducing state authority:

Nothing in this section shall be construed to preempt any authority of any State to take action to ensure the safety, adequacy, and reliability of electric service within that State, as long as such action is not inconsistent with any reliability standard ⁹⁸

Yet through the IRAS Proposal, PJM is seeking authority to do exactly what FPA Section 215 says is not authorized, that is to set a standard for the adequacy of electric service.⁹⁹ In particular, PJM is seeking an outcome whereby a defined class of retail customers, Eligible New Large Loads, will receive service of a lesser grade than every other customer, and it proposes to enforce that declaration

⁹⁵ 16 U.S.C. § 824o(a)(1).

⁹⁶ *Id.* § 824o(i)(1).

⁹⁷ 16 U.S.C. § 824o(i)(2).

⁹⁸ 16 U.S.C. § 824o(i)(3).

⁹⁹ PJM admits this as it describes IRAS as addressing “resource adequacy,” and calibrates the IRAS quantity to a shortfall against the PJM Region Reliability Requirement. See PJM Transmittal Letter at 21–22, 70–72.

through the Reliability Standards. But FPA Section 215 does not allow that result. Instead, it provides that which classes of customers receive firm service, the order in which those classes are curtailed when service must be reduced, and how much curtailable load a class must supply, are state matters. Consistent with the FPA, these cannot be set by federal tariff as PJM seeks.

PJM further wants to displace states' authorities to prioritize the order of curtailment contrary to Section 215. It plans to call IRAS before Pre-Emergency Load Management, a category that includes Demand Resources that voluntarily elected to curtail to be compensated at a federally determined rate.¹⁰⁰ A state may prefer that Demand Resources be exhausted first, because those customers voluntarily elected to provide, and be compensated for, their curtailments. PJM would preclude that such that, while today, priority of service among customer classes is the core of what state commissions determine, in the future, that will be determined by PJM Tariff Attachment DD-4.

PJM, in fact, concedes that state retail tariffs must be revised to fit within its new framework, ironically, just within a few breaths of saying that "PJM is not looking to change any existing approach."¹⁰¹ A federal tariff that is premised on states taking action to rewrite their retail tariffs to conform, but that cannot require that to happen, yet operates whether or not they do so, cannot be found to be just and reasonable.

¹⁰⁰ PJM Transmittal Letter at 101; proposed Tariff, Attachment DD-4, § III.

¹⁰¹ PJM Transmittal Letter at 85, 87–89.

G. PJM's Proposal is Inconsistent with NERC Reliability Standards it Relies Upon

PJM seeks to define an Interim Resource Adequacy Service Action as “an Operating Instruction, as defined by NERC.”¹⁰² From there, it is able to mandate compliance because Reliability Standards IRO-001-4 R2 and TOP-001-6 R3 on which PJM relies affirmatively apply to Registered Entities subject to the standards.¹⁰³ IRAS does not satisfy NERC's definition of an Operating Instruction, however. NERC's Glossary defines an Operating Instruction as:

A command by operating personnel responsible for the Real-time operation of the interconnected Bulk Electric System to change or preserve the state, status, output, or input of an Element of the Bulk Electric System or Facility of the Bulk Electric System. (A discussion of general information and of potential options or alternatives to resolve Bulk Electric System operating concerns is not a command and is not considered an Operating Instruction.)¹⁰⁴

IRAS does not meet that definition for a variety of reasons, a key one of which is that, by statute, the Bulk Electric System excludes retail load served through distribution facilities,¹⁰⁵ and there is no mistake that IRAS is targeted to a curtailment response by retail load. This is a critical point because if the response to PJM's instruction is not mandatory under a NERC Reliability Requirement, IRAS

¹⁰² *Id.* at 84; proposed Tariff, Definitions – Interim Resource Adequacy Service Action.

¹⁰³ While these Standards are mandatory on the Registered Entities to which they apply, PJM has failed to address the fact that they contain exceptions. For example, IRO-001-4 R2 requires compliance “unless compliance with the Operating Instructions cannot be physically implemented or unless such actions would violate safety, equipment, regulatory, or statutory requirements.” NERC, Reliability Standard IRO-001-4, Requirement R2, https://www.nerc.com/globalassets/standards/projects/technical-rationale/iro-001-4_clean_030723.pdf. State requirements can trigger the exception.

¹⁰⁴ NERC, Glossary of Terms Used in NERC Reliability Standards, “Operating Instruction,” <https://www.nerc.com/glossary-of-terms?alpha=O>.

¹⁰⁵ 16 U.S.C. § 824o(a)(1).

adds nothing to the authorities PJM has today, and Attachment DD-4 is implementing processes not authorized by the NERC Reliability Standards. As a further disconnect, PJM has fabricated Attachment DD-4 § III(a) as providing directions to “Electric Distributors,” and neither Reliability Standards IRO-001-4 nor TOP-001-6 apply to Electric Distributors.

Suffice it to say that a discussion of the problems with, and internal inconsistencies and potential unintended consequences of, the PJM IRAS Proposal are extensive and significant. PJM is seeking to tinker with decades of carefully crafted market rules and Reliability Standards that protect the grid from failure. Its proposal is an untested and unsupported experiment, the failure of which could have catastrophic consequences. PJM’s failure to sponsor witnesses on these points is an omission the Commission should not overlook, as reputable economic and market design experts providing evidentiary support are a necessity to support a major market rule change as is proposed in IRAS but are notably absent. PJM has not justified its proposal and the Commission should reject it.

H. The IRAS Proposal is Inconsistent with FPA Section 201 and Commission Decisions Imposing the Bright-Line Test it Imposes.

FPA Section 201(b)(1) provides the Commission with jurisdiction over the sale of electric energy at wholesale in interstate commerce, and provides that such jurisdiction “shall not apply to any other sale of electric energy,” and further excludes from the Commission’s jurisdiction “facilities used in local distribution.”¹⁰⁶ Section

¹⁰⁶ 16 U.S.C. § 824(b)(1).

201(a) confines federal regulation to matters “not subject to regulation by the States.”¹⁰⁷ Here, PJM is seeking to influence whether a retail customer receives firm or interruptible service. This falls on the state side of the FPA’s bright line.

PJM wrongly relies on the decision in *EPSA*¹⁰⁸ as supporting a finding of federal jurisdiction over IRAS because IRAS has a direct effect on wholesale capacity rates. However, the EPSA decision stated the following, which is not true of the IRAS Proposal, the order: (1) “addresse[d] — and addresse[d] only — transactions occurring on the wholesale market”; (2) it “did not set actual rates,” because “States continue to make or approve all retail rates;” and (3) it preserved a veto for retail regulators.¹⁰⁹ IRAS satisfies none of the three. First, Attachment DD-4 § III(b) requires Electric Distributors to furnish PJM the “applicable state or RERRA retail tariff or contractual obligations.” Second, its § X(c) provides that unless the retail customer elects to accept a lesser sum “in its retail rates” it must waive compensation. Third, PJM concedes that “the IRAS rate is intended to be conjoined with retail rates” and that implementation “relies on application of state retail law.”¹¹⁰

The contrast between the IRAS Proposal and a proposal that does respect the jurisdictional line, that in Order No. 719, is stark. Order No. 719 supplies an express requirement that aggregator bids cannot be accepted when “the laws or

¹⁰⁷ 16 U.S.C. §§ 824(a), (b)(1); *see also New York v. FERC*, 535 U.S. 1, 22–24 (2002).

¹⁰⁸ PJM Transmittal Letter at 91 (citing *FERC v. Elec. Power Supply Ass’n*, 577 U.S. 260 (2016) (“*EPSA*”).

¹⁰⁹ *EPSA*, 577 U.S. at 281–83.

¹¹⁰ PJM Transmittal Letter 104, 106; proposed Tariff, Attachment DD-4, §§ III(b), X(c).

regulations of the relevant electric retail regulatory authority do not permit a retail customer to participate.”¹¹¹ PJM obtains evidence of Retail Authority authorization before it acts.¹¹² To the contrary, PJM proposes to impose IRAS whether or not states have agreed to all of its provisions. PJM essentially states in its filing that it is seeking to accomplish indirectly what it cannot do directly through IRAS.¹¹³ However, an agency may not accomplish indirectly what it lacks power to accomplish directly.¹¹⁴ The Commission should tread with caution with regard to overstepping Section 201 of the FPA’s bright line in favor of avoiding the serious question of whether a federal program can be imposed on unwilling states given Congress’ respective authorities granted to the states and withheld from the Commission.¹¹⁵ This was true even before *Loper Bright* removed deference to the

¹¹¹ Order No. 719, 125 FERC ¶ 61,071 at P 154 (2008), and Order No. 719-B, 129 FERC ¶ 61,252 at P 5 (2009).

¹¹² PJM Transmittal Letter at 47.

¹¹³ PJM Transmittal Letter at 85 (“PJM might not be able to directly reduce the loads of Eligible New Large Loads to the extent they are available to provide IRAS, PJM can direct others to do so with a high degree of confidence that such directives will be followed.”) A PJM-mandated wholesale quantity executed through directed retail-level curtailment achieves indirectly—by the Electric Distributor’s compelled compliance—the functional equivalent of the retail curtailment mandate PJM disclaims authority to impose directly.

¹¹⁴ See *Altamont Gas Transmission Co. v. FERC*, 92 F.3d 1239, 1248 (D.C. Cir. 1996) (rejecting FERC’s attempt “to do indirectly what it could not do directly,” where the Commission used its jurisdictional authority over an interstate pipeline’s certificate to pressure a state regulator into changing a non-jurisdictional, state-regulated rate structure that FERC itself lacked power to order directly); *Nw. Cent. Pipeline Corp. v. State Corp. Comm’n of Kan.*, 489 U.S. 493, 512 (1989) (quoting *FPC v. Panhandle E. Pipe Line Co.*, 337 U.S. 498, 513 (1949)) (“The NGA was designed to supplement state power and to produce a harmonious and comprehensive regulation of the industry. Neither state nor federal regulatory body was to encroach upon the jurisdiction of the other.”) (internal quotation marks omitted).

¹¹⁵ See *Edward J. DeBartolo Corp. v. Fla. Gulf Coast Bldg. & Constr. Trades Council*, 485 U.S. 568, 575 (1988) (stating that “where an otherwise acceptable construction of a statute would raise serious constitutional problems, the Court will construe the statute to avoid such problems unless such construction is plainly contrary to the intent of Congress”); see

Commission's decisions as to the scope of its own authority, but is especially important today.¹¹⁶

The IRAS Proposal deviates from Commission precedent respecting the states' zones of authority. As PJM acknowledges, the Commission has held that states retain exclusive jurisdiction over "how the costs of the wholesale sale and transmission of electricity assigned to a wholesale customer are allocated among that wholesale customer's retail customers,"¹¹⁷ and that states continue to regulate "the specific terms of retail sales to large load."¹¹⁸ Contrary to these restrictions, IRAS would introduce a curtailment priority and a compensation-waiver election that each apply to retail sales to large loads. The load reductions in the quantities IRAS proposes would be federally enforced based on PJM's method of calculating the MWs to be curtailed and its method of allocating curtailments to a state, region

also Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng'rs, 531 U.S. 159, 172–174 (2001) (holding that where an agency's interpretation "invokes the outer limits of Congress' power," courts "expect a clear indication that Congress intended that result," and declining to read the Clean Water Act to reach isolated waters because doing so "would result in a significant impingement of the States' traditional and primary power over land and water use"); *Gregory v. Ashcroft*, 501 U.S. 452, 460–61 (1991) (explaining that "if Congress intends to alter the usual constitutional balance between the States and the Federal Government, it must make its intention to do so unmistakably clear in the language of the statute") (internal quotation marks omitted); *cf. Murphy v. NCAA*, 584 U.S. 453, 473–78 (2018) (distinguishing impermissible federal commands to states from permissible "cooperative federalism" arrangements in which a state retains a genuine choice whether to participate in a federal regulatory scheme).

¹¹⁶ *Loper Bright Enters. v. Raimondo*, 603 U.S. 369 (2024); *see also West Virginia v. EPA*, 597 U.S. 697 (2022).

¹¹⁷ PJM Transmittal Letter at 90 (quoting *PJM Interconnection, L.L.C.*, 190 FERC ¶ 61,115 at P 68 (2025), *order directing compliance*, December 2025 Show Cause Order, 193 FERC ¶ 61,217 (2025)).

¹¹⁸ PJM Transmittal Letter at n.239 (quoting June 2026 Order to Show Cause, 195 FERC ¶ 61,211 at P 48 (2026)).

or zone. This displaces state authority in an area reserved to the states. The Commission should reject the IRAS proposal as being inconsistent with FPA Section 201.

II. COMMUNICATIONS

Please add the following representatives of P3 to the service list maintained by the Secretary in this proceeding:

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To the extent necessary, P3 respectfully requests a waiver of Commission Rule 203(b)(3), 18 C.F.R. § 385.203(b)(3), to allow service to be made and communications to be addressed to each of these individuals.

III. CONCLUSION

P3 members stand ready to address the challenge of adding new capacity to the grid to support the demands of New Large Loads. The overwhelming response to the recent Cycle One queue – over 220 GWs of new capacity – stands as a testament to the available supply poised to enter the market if durable market rules are upheld.¹¹⁹ However, to maintain reliability while new large loads are added to the grid, both new and existing resources require market-based signals

¹¹⁹ See RTO Insider, “PJM Receives 811 Interconnection Requests in Queue Cycle 1,” <https://www.rtoinsider.com/131291-pjm-receives-811-interconnection-requests-queue-cycle-1/>.

that accurately reflect the value of capacity. That accurate price signal can only be achieved by including all loads in the capacity auctions so that all supply can compete to serve that load. The vision of the PJM capacity construct is to encourage new capacity to be added to the system, and existing capacity to remain on the system, based on the auction price signal. The IRAS Proposal represents a fundamental and dangerous divergence from this tenet of a sound market design.

P3 takes little comfort in this moment in arguing that this filing must be rejected, but this filing is so fundamentally flawed that rejection is the only just and reasonable action the Commission can take. In rejecting the filing, the Commission should encourage PJM to refile the Large Load Registry proposal as a separate Section 205 submission while offering to provide all necessary and appropriate support to state commissions seeking to integrate large loads at the distribution level on terms and conditions set by state regulatory authority. These state efforts can include the development of state regulatory frameworks designed to enable states to better integrate large loads while maintaining reliability and protecting existing customers.

In particular, the Commission and PJM should support the collaborative effort put forward by the Virginia State Corporation Commission and the Data Center Coalition to develop a model large load interruptible tariff and a model emergency load reduction tariff that states throughout the region may decide to use as a springboard for their efforts. While no states are required to adopt any model, and every state interested in doing so can customize the tariff to meet its

own state laws and needs, this approach avoids the jurisdictional overreach subsumed in the IRAS Proposal. Thoughtful state-level tariffs throughout PJM that provide clear rules of the road for developers and protections for consumers will provide the forward visibility necessary to shepherd the entire region through this unique and unprecedented challenge.

/s/ Sandra E. Rizzo

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September 3, 2026

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C.

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Docket No. ER26-3515-000

AFFIDAVIT OF CARL COSCIA
ON BEHALF OF PJM POWER PROVIDERS GROUP

I. INTRODUCTION AND QUALIFICATIONS

1. My name is Carl F. Coscia. I am the Principal of Toller Energy, an independent energy consulting firm. My business address is Wynnewood, Pennsylvania 19096. I have been retained by the PJM Power Providers Group to evaluate the capacity market consequences of the Interim Resource Adequacy Service (“IRAS”) and Large Load Registry proposed by PJM Interconnection, L.L.C. The opinions expressed in this affidavit are my own. No part of my compensation is contingent on the outcome of this proceeding.

2. I hold a Ph.D. in Economics from the University of Minnesota, and a B.S. in Economics and a B.A. in Mathematics from the University of Kansas. I have more than twenty-five years of experience in wholesale power and commodity markets, concentrated in market design, risk and regulatory proceedings, and have provided testimony, affidavits or economic analysis in more than forty proceedings before the Federal Energy Regulatory Commission, the Commodity Futures Trading Commission, and other regulatory and self-regulatory bodies.

3. From September 2022 to March 2026 I served as Chief Risk Officer of PJM Interconnection, L.L.C., where I led the corporate risk function across the energy, capacity and financial transmission rights markets. In that role I was responsible for the risk assessment of market design changes, including changes to the Reliability Pricing Model (“RPM”), and for the Key Risk Metrics reported to the Risk Management Committee.

4. Earlier in my career I served as a Branch Chief in the Office of Enforcement at the Federal Energy Regulatory Commission, during the period in which the Commission was approving the formation of Regional Transmission Organizations and considering the capacity market constructs that became the Reliability Pricing Model. I subsequently held senior risk and commercial roles at EnBW AG, Hartree Partners, LP, Constellation Energy and TXU, and consulting positions at The Brattle Group. My experience has required me to evaluate the Reliability Pricing Model as Commission staff, as PJM’s Chief Risk Officer, and in commercial roles in which market participants commit capital in reliance on market prices.

5. In preparing this affidavit I have reviewed the August 13, 2026 filing in this docket and the affidavit submitted with it, the provisions of the Open Access Transmission Tariff, the Operating Agreement and the Reliability Assurance Agreement to which those provisions refer, PJM's planning parameters and Base Residual Auction reports, the materials presented to PJM stakeholders during development of the proposal, the record in Docket No. ER26-3380-000, and PJM's 2005 filing proposing the Reliability Pricing Model. Materials on which I rely are cited where used.

6. Terms used in this affidavit have the meanings given in the PJM Tariff unless otherwise stated. "Posted" and "Published" identify figures reproduced from cited PJM materials. "Derived" identifies calculations from those sources. "Scenario" identifies results under stated fixed assumptions; none is a forecast.

II. EXECUTIVE SUMMARY

7. *What the model was built to do.* PJM named its capacity market construct the Reliability Pricing Model. The first word is reliability; the second is pricing. PJM proposed it in 2005 to replace a construct that, in its words, "fail[ed] to assure that reliability will be maintained at the lowest reasonable cost, and as such, [was] unjust and unreasonable." PJM Interconnection, L.L.C., Docket Nos. Nos. ER05-1410-000 and EL05-148-000, Transmittal at 3 (Aug. 31, 2005). Its central feature was a downward-sloping demand curve, selected as the curve offering "the best combination of high reliability and low long-term cost," on the reasoning that dampening volatility would allow "investors to make reasonable predictions of revenue streams" and thereby "reduce[] . . . the return required by investors resulting in savings in consumer costs." *Id.* at 12, 24. The demand curve is where the quantity of capacity the Region needs becomes the price paid to whatever resource meets it.

8. *How this filing departs from that design.* The proposal removes New Large Load from the demand curve while PJM continues to plan around serving that same load in the load forecast, the reliability studies, the capacity obligations allocated under the Reliability Assurance Agreement, transmission planning and real-time operations. In 2005 PJM identified as a defect of the prior construct that it gave demand resources "no meaningful opportunity . . . to compete to satisfy reliability requirements," and sought a design letting them "compete on an equal basis with existing generation resources." *Id.* at 3, 9. Interim Resource Adequacy Service load is not treated as Demand Response is treated. These reductions are: not willingly supplied; not studied for accreditation value; not clearly measured against a committed quantity; without a clear compliance obligation; and paid a rate asserted to be just and reasonable only by analogy to a charge applied to resources that hold capacity commitments. Under the proposed filing these reductions do not compete with other capacity resources as the original design contemplated. The load is removed from the Curve instead, and its removal de facto eliminates the need for the Generation Capacity Resources and Demand Resources that would otherwise have competed to serve it.

9. *How the Excluded Amount operates.* The Excluded Amount is New Large Load, as recorded in the Large Load Registry this filing would establish, appearing in the load forecast above the 2028/2029 level, less load supported by Bring Your Own New Capacity (“BYONC”) or assigned Allocated RBP UCAP MW. It is subtracted before the Curve is constructed, so the three points defining the downward-sloping portion are located at a smaller quantity: the Curve moves left and its sloped segments steepen. Reliability Backstop Procurement capacity offering at \$0/MW-day separately moves supply right. Either change can reduce the clearing price where the auction clears on a price-responsive segment of the Demand Curve.

10. *My principal conclusion.* The proposal separates the load PJM plans to serve from the capacity the Reliability Pricing Model procures to serve it. PJM designed that model to deliver, on average over an asset’s life, the net cost of new entry — the revenue a resource requires beyond what the energy and ancillary services markets provide. In 2005 PJM told the Commission the problem it sought to solve was that “net revenue to generators from all sources . . . has been insufficient to cover the cost of investment in the most efficient marginal capacity unit.” *Id.* at 7. The filing makes no showing that the price its design produces will deliver that revenue.

11. *Planning and procurement diverge.* From 2028/2029 through 2032/2033, peak load net of load in an FRR Service Area grows 31,026 MW while the Reliability Requirement net of the Excluded Amount changes by 584 UCAP MW. These are not equivalent reliability measures, but their divergence shows that the procurement target no longer moves proportionately with the load PJM must plan to serve. Excluding load of that magnitude from the Demand Curve, year after year, bears directly on the premise of the construct. ¶ 64.

12. *Investor perspective.* I evaluate the proposal from the perspective of an investor deciding whether to build, finance or retain capacity in PJM. Entry and retention are connected over the life of an asset: every new resource becomes an existing resource, and both are required to maintain reliability. The results are scenarios, not forecasts, and Appendix A states the model and assumptions.

13. *The exclusion is large enough to matter.* The 2028/2029 auction cleared 5,380 MW to the left of Point 1, the first of the three points from which the Demand Curve is constructed and the quantity at which the Curve reaches its maximum price. For 2029/2030 the modeled Excluded Amount closes all but approximately 290 MW of that distance. The auction therefore remains on the flat segment in the base case, and the collar independently controls that year’s result. The exclusion nevertheless makes the outcome sensitive to a small change in supply, and positions later auctions to clear on the reduced Curve once the collar expires. PJM offers no forecast of what this does to reliability, in terms either of retaining the current rate of new investment or of stemming recent retirements. ¶¶ 27–35.

14. *Modeled effect on clearing prices.* The Excluded Amount does not change the supply available; it changes the Demand Curve against which that supply is offered. Holding the

modeled supply path constant and changing only the Demand Curve, the modeled clearing price first falls below the most recently posted Net Cost of New Entry in 2030/2031, the first Delivery Year after the collar expires. ¶¶ 38–40.

15. *Consequences for entry and retention.* Numerous price paths in the scenarios examined produce clearing prices below the most recently posted Net Cost of New Entry, and on several of them the shortfall persists across successive Delivery Years. PJM identified the consequence of revenues below that level in its 2005 filing: a spike in announced retirements of units that “nonetheless are needed for reliability,” and a warning that “generator revenues in PJM may not be adequate to sustain the investments needed to maintain reliability in all parts of the PJM region.” *Id.* at 6. A sustained price below that benchmark may weaken the signal for new entry and, depending on resource-specific going-forward costs, may also affect retention. ¶¶ 41–45, 63.

16. *Matched Bring Your Own New Capacity.* PJM’s one-for-one rationale substantially holds where the supporting capacity is additional to projected additions, arrives with the load, and is deliverable to the relevant location. The Tariff permits configurations in which those conditions may not hold: the capacity may already be among the projected additions, may precede the load under section VII(h), or may sit outside a constrained Locational Deliverability Area in which the load remains excluded. The filing does not quantify those alternatives. ¶¶ 53–57.

17. *The reduction is not conditioned.* The Fixed Resource Requirement Alternative, the Peak Shaving Adjustment and Price Responsive Demand each condition a reduction in the procurement target on a defined commitment, and Price Responsive Demand on a price stated in advance. The Excluded Amount is triggered by the appearance of load in a forecast. Unlike those mechanisms, the Excluded Amount is not conditioned on a specified commitment or performance requirement. ¶¶ 96–102, 134–135.

18. *The cumulative effect.* If the filing is accepted, PJM will construct the 2029/2030 Demand Curve using the reduced procurement base. The reduction will recur as qualifying load enters the forecast and will apply whether or not PJM ultimately calls an Interim Resource Adequacy Service event. Under the scenarios examined, the immediate effect is a smaller procurement target and increased sensitivity to the location of supply relative to Point 1; after the collar expires, several modeled paths produce materially lower clearing prices than the most recent Net Cost of New Entry calculation published by PJM. ¶¶ 64–68.

19. *The long-term effect.* Load that is on the system and requires generation to serve it would be excluded from the Demand Curve. That is a departure from the premise of the construct, and if approved the filing would make the departure part of the ordinary operation of the Reliability Pricing Model rather than a one-time accommodation. PJM proposes no end date for the program. Where the Region is not short for three consecutive Delivery Years the program becomes dormant, but the Large Load Registry is retained and the exclusion re-emerges on a reset load vintage if shortfall conditions return. As additional qualifying load enters the forecast the Excluded Amount recurs and grows, and the filed Tariff does not state when previously excluded load returns to the procurement base. The

result is a bifurcated capacity market: load inside the Demand Curve, against which PJM procures capacity, and load outside it, which PJM plans and operates the system to serve but does not buy against. A market in which a substantial and growing share of load sits outside the mechanism designed to price reliability weakens the connection between the system PJM plans to operate and the capacity the model procures, with corresponding consequences for entry, retention and resource adequacy. ¶¶ 64-68.

20. *Five matters warrant Commission attention:* whether procurement against a reduced load base satisfies the same reliability criterion used to derive the planning parameters; whether the proposed mechanisms provide an equivalent accredited or binding substitute in every permitted configuration; whether the modeled price path remains adequate to support entry and retention; whether the differing treatment of other demand-side procurement reductions is justified; and whether the proposed compensation benchmark measures the service New Large Load provides. ¶¶ 146-151.

III. EFFECT ON RPM CLEARING PRICES AND THE RESOURCE-ADEQUACY INVESTMENT SIGNAL

How I approached the question

21. I evaluate how the proposal affects decisions to commit, retain or withdraw capital in PJM capacity. A resource that cannot expect to cover its going-forward costs may deactivate or leave the Region, and that decision responds to the same signal as a decision to build. Price is the mechanism through which a reduced procurement quantity reaches those decisions. New entry and retention are not separate market-design questions. Every new resource becomes an existing resource, and PJM must provide a sufficient and durable investment signal throughout the asset's operating life. The Reliability Pricing Model was designed to deliver, on average over that life, the net cost of new entry: the revenue a resource requires beyond what the energy and ancillary services markets provide. That shortfall is what the capacity market exists to supply. A capacity market that lowers the revenue a resource can expect affects both the decision to build and the decision to keep operating, and resource adequacy depends on both.

22. The mechanism works through the auction's demand curve. PJM decides in advance how much capacity it will buy at each price, and that schedule is the Variable Resource Requirement Curve. The filing would subtract the Excluded Amount from the quantity on which that Curve is built, so PJM would buy less capacity at every price, while continuing to count the same load when it calculates how much capacity the Region needs to serve its load reliably. Separately, capacity procured through the Reliability Backstop Procurement is required to participate in the auction as a price taker at \$0/MW-day, which adds supply that clears regardless of price. Buying less and adding supply that always clears both push the clearing price down. Neither does so while the auction clears on the flat portion of the Curve; once it clears on a sloped portion, both do.

23. Attachment DD, section 5.10(a) establishes the Curve by reference to three points. The unforced capacity at each point is a percentage of a bracketed quantity, and the price at each point is fixed by a separate formula. The percentages are 99, 101.5 and 106.0 percent, and the prices run from the Point 1 price down to zero at Point 3. The Excluded Amount is subtracted inside the bracket, before the percentages are applied.

24. Subtracting the Excluded Amount inside the bracket moves every point on the Curve left and reduces the horizontal distance between the points in the same proportion. Because the price at each point remains unchanged, the Curve steepens by a factor of $1 / (1 - E / RR)$.

25. Figure 1 shows both effects and their consequence for price. The same supply that met the flat segment of the original Curve, and cleared at the Point 1 price, meets a sloped segment of the reduced Curve and clears below it. Whether that occurs depends on where supply sits relative to Point 1. The next subsection quantifies that distance.

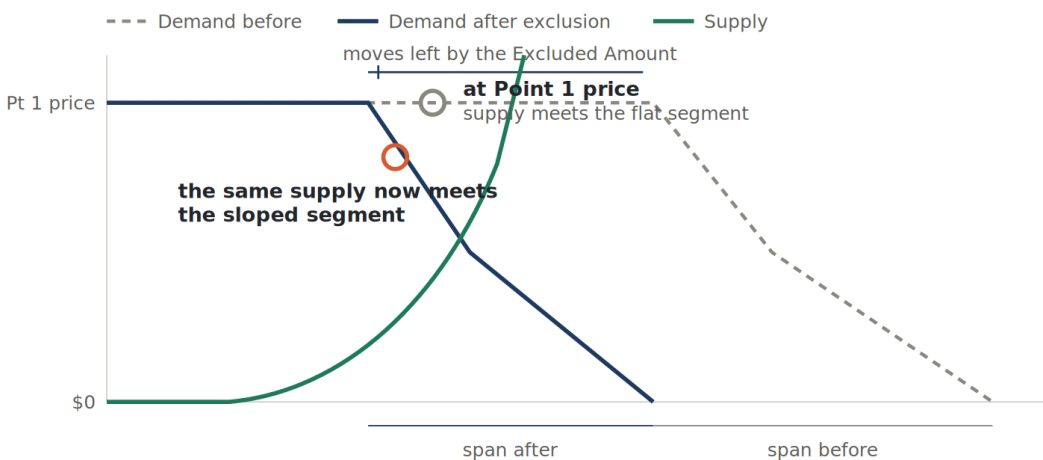


Figure 1. The two effects of the Excluded Amount on the Curve, and the consequence for the clearing price.

26. The results below are scenarios and not forecasts of auction outcomes. They hold specified assumptions constant in order to isolate the direction, magnitude and sensitivity of the effects an investor would evaluate. They compare capacity revenues between two modeled cases; they are not an asset valuation, and I have not performed a discounted cash flow analysis. Appendix A sets out the auction model, the data sources, the calculations and the full sensitivities.

Starting conditions

27. The 2028/2029 Base Residual Auction establishes the conditions against which the exclusion would first operate.

Quantity	UCAP MW
FRR-adjusted Reliability Requirement	145,149.1
Capacity committed	138,317.8
Shortfall	6,831.3
Shortfall as a share of the requirement	4.71%

The auction cleared at \$325.00/MW-day, on the horizontal segment of the Curve and 5,380 MW to the left of Point 1. 2028/2029 Base Residual Auction Report 11, Table 5 (July 14, 2026), available at <https://perma.cc/X6UH-4ER4>.

28. Figure 2 places that outcome on the Curve. Supply is the near-vertical line at 138,318 UCAP MW; Point 1 stands at 143,698 MW; and the 5,380 MW between them is the distance the market must close before price begins to respond. A price collar also applied. The collar held the price at \$325.00 where the tariff Curve, shown as the grey dashed line, would have produced a higher figure.

29. The collar is a Commission-accepted cap and floor on the clearing price, extended to all Reliability Pricing Model auctions for the 2028/2029 and 2029/2030 Delivery Years. *PJM Interconnection, L.L.C.*, 195 FERC ¶ 61,076 (2026). The Tariff states the cap as \$256.75/MW-day in installed capacity terms divided by the ELCC Class Rating for the Reference Resource, which is the Gas Combustion Turbine Dual Fuel class. Tariff, Attachment DD, section 5.10(a). That formula reproduces each posted value: at a 78 percent rating the cap was \$329.17 for 2026/2027; at 77 percent, \$333.44 for 2027/2028; and at 79 percent, \$325.00 for 2028/2029, the price at which that auction cleared. *[Derived.]* The endorsed 2029/2030 rating is 76 percent, which sets the cap at \$337.83/MW-day and the corresponding floor at \$181.91. *[Derived.]* The collar does not apply to any later Delivery Year in the period examined.

30. PJM described the purpose of the collar in terms that bear directly on this proceeding. It said the cap and floor together would “protect[] consumers from price volatility outside the bounds of the price collar while also enabling capacity prices to reflect the system’s need for capacity and support near-term capacity investment in PJM,” and that narrowing auction outcomes “is necessary to maintain investor confidence because the capacity market relies on investors to respond to auction clearing price signals.” *Id.* PJM added that the viability of its capacity market “hinges on its ability to induce efficient entry, retention, and/or retirement of Capacity Resources through capacity prices.” *Id.* The Commission accepted the collar as reasonably addressing “concerns about excessive price volatility” while PJM considers reforms “to address resource adequacy challenges and better reflect the needs of investors and customers.” *Id.* PP 129-130.

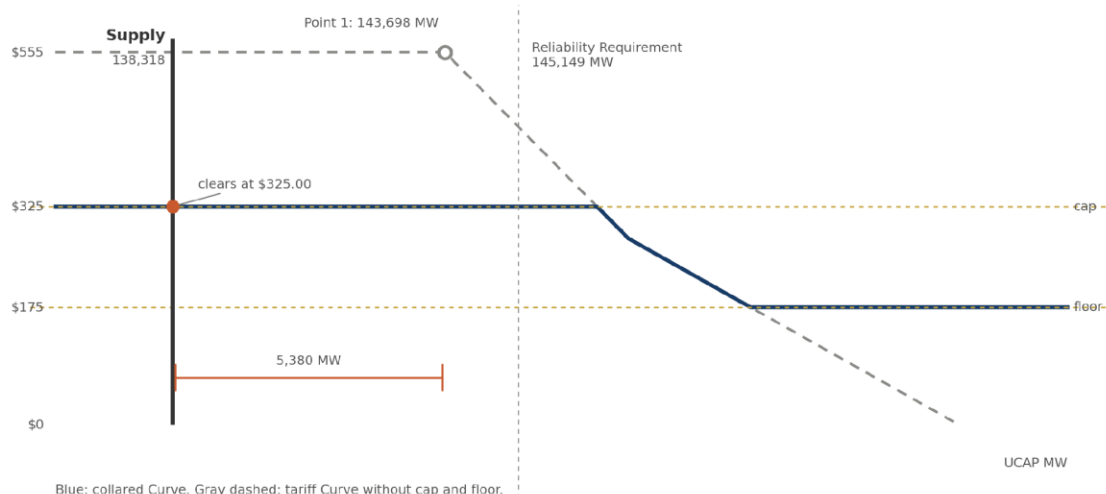


Figure 2. The 2028/2029 Curve, the collar, and the cleared quantity.

31. PJM proposes in Docket No. ER26-3380-000 to procure capacity through a Reliability Backstop Procurement. Committed capacity is subject to a \$0/MW-day offer obligation, and once subject to that obligation it enters the supply stack at that price and would ordinarily clear, whether or not the load it was procured against has arrived.

32. The Final Target is not fixed, and I use the illustrative quantity of 6,075.7 UCAP MW. Eligibility for the procurement requires a commercial operation date no later than June 1, 2032, so the outer limit on when the capacity enters service is established. What the record does not establish is which auction the capacity first offers into, and paragraph 37 states the assumption I make for 2029/2030. One effect is fixed: capacity offered at \$0/MW-day moves the supply curve to the right.

33. Dr. Shanker addresses the supply-side timing effect created when backstop capacity enters the auction before the associated load. Shanker Aff. paragraphs 13 to 17, Docket No. ER26-3380-000 (Aug. 21, 2026). My analysis examines the corresponding demand-side effect created when forecast load is removed from the Curve. The two operate on opposite sides of the same auction.

34. The exclusion first affects price when the reduced Curve intersects supply on a downward-sloping segment rather than the flat segment at the Point 1 price. I refer to that quantity of exclusion as the threshold, because the market clears at the Point 1 price until the threshold is reached and then moves down the slope, with every further megawatt of exclusion and every megawatt of zero-priced supply lowering the price. The distance between supply and Point 1 therefore determines both whether the exclusion affects price and how quickly. Figure 2 shows the geometry: supply is to the left of Point 1, so the market clears on the flat segment, and the distance between them is what has to be closed.

35. The 2029/2030 Curve can be located from posted data, because its quantities follow from the endorsed planning parameters and the Excluded Amount is the only unposted term. Figure 3 repeats the construction of Figure 2 one Delivery Year forward, with the

Excluded Amount applied. On the Table B-9b proxy for that term, the modeled supply sits 5,461 MW from Point 1. The Excluded Amount alone closes 5,171 MW of that distance, leaving approximately 290 MW. *[Derived; Appendix A.2.]* A market 4.71 percent below its Reliability Requirement moves within 290 MW of Point 1 without any backstop capacity, because Point 1 is 99 percent of a requirement from which the Excluded Amount has already been subtracted. The exclusion therefore brings the market close enough to Point 1 that a relatively small additional supply increment can affect price in the first Delivery Year in which the exclusion operates.

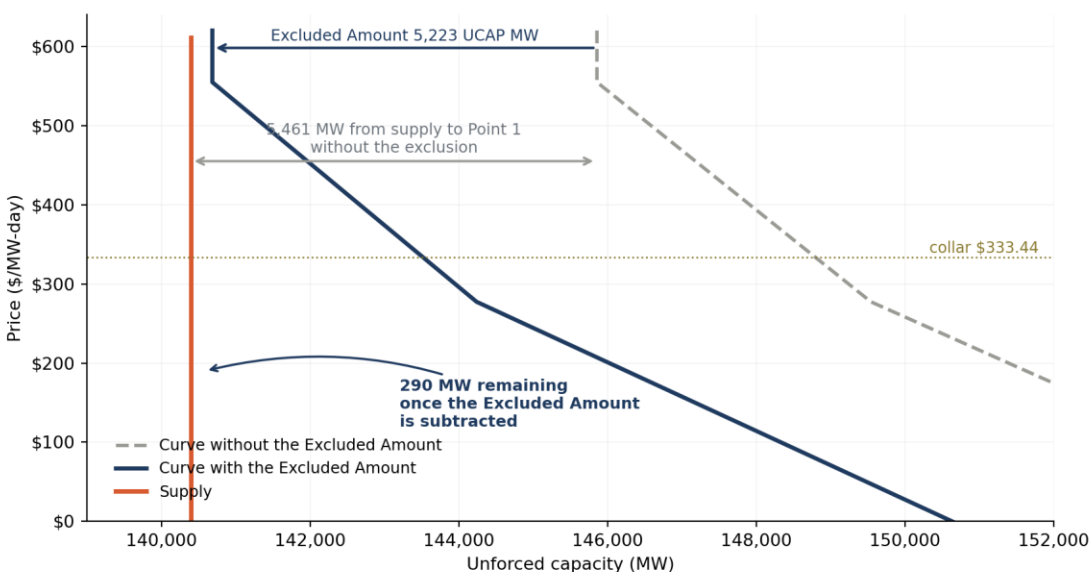


Figure 3. The 2029/2030 Curve with and without the Excluded Amount, and the distance from supply to Point 1. Derived, scenario. The same construction as Figure 2, one Delivery Year forward and with the Excluded Amount applied. The Excluded Amount closes all but approximately 290 MW of the distance between supply and Point 1.

The two cases and their common assumptions

36. I compare two cases. In the counterfactual case the Curve is constructed on the Reliability Requirement without the Excluded Amount. In the filing case it is constructed as section 5.10(a) provides. Supply follows a single path across the Delivery Years, growing at the rate stated below, and that same path is used in both cases. Within any one Delivery Year, therefore, the two cases face identical supply and differ only in the Curve, so the difference in clearing price for that year is attributable to the Excluded Amount alone.

37. The following inputs are held on the same basis in both cases.

Input	Treatment
Supply additions	4,164 MW of installed capacity per year, the rate observed across the four most recent Delivery Years, converted to unforced capacity at the marginal accreditation rate stated at Appendix A.4
Backstop, 2029/2030	None in the Base Residual Auction. Awards are expected after the deadline for a Notice of Intent to Offer into that auction, and Attachment DD section 18.6(a) contemplates that resources without such a notice enter through an Incremental Auction. Full participation is stated as a sensitivity
Backstop, later years	The illustrative Final Target of 6,075.7 UCAP MW offered at \$0/MW-day
BYONC, 2029/2030	None. The reporting deadline under Attachment DD-4 section VII(c) is October 20, 2026, fifty days before the auction PJM states will commence December 9, 2026. Even if the Commission acted by that date, no meaningful interval remains in which to establish the Large Load Registry, form and verify a ten-year arrangement, and report it.
BYONC, later years	Alternative coverage tested below
Allocated RBP UCAP MW	Restores load to the Curve without adding supply, the backstop quantity already being in the zero-price block. The quantity reaching post-baseline New Large Load is not determinable on this record
Excluded Amount	The Table B-9b increment above the 2028/2029 baseline, converted to unforced capacity terms. This is a proxy and an upper bound
Forecast Pool Requirement	0.9232 in every Delivery Year. That value is endorsed for 2029/2030 only

Appendix A.5 sets out the scenario results in full, and A.2 to A.4 the derivation of each assumption.

Modeled effect on RPM clearing prices

38. The table below compares the clearing price with and without the Excluded Amount, holding the modeled supply path constant. Under the current growth path for installed capacity, the exclusion produces a price path that falls below the most recently posted Net Cost of New Entry as early as 2030/2031 and remains below it in each later Delivery Year examined.

Delivery Year	Without exclusion (\$/MW-day)	With exclusion (\$/MW-day)	Price effect (\$/MW-day)	Annual effect per UCAP MW
2029/30	\$337.83	\$337.83	—	—
2030/31	\$554.72	\$206.02	-\$348.70	-\$127,276
2031/32	\$554.72	\$178.07	-\$376.65	-\$137,477

Delivery Year	Without exclusion (\$/MW-day)	With exclusion (\$/MW-day)	Price effect (\$/MW-day)	Annual effect per UCAP MW
2032/33	\$554.72	\$156.79	-\$397.93	-\$145,244

[Derived, scenario. Appendix A.5.] In 2029/2030 the collar sets the price in both cases and the exclusion produces no modeled price effect. Where the illustrative backstop quantity is instead assumed to offer into that auction, the price with the exclusion falls to \$244.64 and the effect is -\$93.19/MW-day, or -\$34,014 per UCAP MW-year. *[Derived; Appendix A.5.]*

39. For a portfolio with 1,000 UCAP MW of cleared capacity, the modeled 2030/2031 difference is approximately \$127 million in annual capacity revenue. The corresponding effect of \$127,276 per UCAP MW exceeds the most recently posted annualized Net Cost of New Entry benchmark of \$118,877 per MW-year. *[Derived.]* This is a comparison of capacity revenues between two modeled cases and not a valuation of any asset.

40. The Excluded Amount does not change the supply available to the market. It changes the Demand Curve against which that supply is offered. The same physical resources are offered in both cases; what differs is the quantity PJM commits to buy and the price at which the auction clears.

Consequences for entry, retention and resource adequacy

41. Under the modeled offer curve and the assumptions stated above, no rate of new capacity additions holds the clearing price at the most recently posted Net Cost of New Entry once the illustrative Reliability Backstop Procurement quantity offers into the auction at \$0/MW-day. With the Excluded Amount applied and no organic additions at all, the modeled 2030/2031 price is \$297.00. *[Derived; Appendix A.5.]* If the Reliability Backstop Procurement instead produced no megawatts, additions would have to remain below approximately 5,330 MW of installed capacity per year in 2030/2031, 3,656 MW in 2031/2032 and 3,018 MW in 2032/2033 to hold the price at that benchmark, against an observed rate of 4,164 MW. *[Derived; installed capacity converted at the marginal accreditation rate of approximately 50 percent stated at Appendix A.33.]* The modeled price therefore falls below the most recently posted entry benchmark while PJM continues to project a need for additional capacity.

42. The full-proxy paths assume the whole Table B-9b increment is excluded, the illustrative Final RBP Target of 6,075.7 UCAP MW offers at \$0/MW-day from 2030/2031, additions arrive at the observed rate of 4,164 MW of installed capacity per year, and no New Large Load holds Bring Your Own New Capacity or Allocated RBP UCAP MW. On those paths the Reliability Pricing Model produces a sustained price below the most recently posted Net Cost of New Entry from 2030/2031 forward, weakening the price signal for new entry during a period in which PJM projects a need for both entry and retention. A single Delivery Year below that benchmark would not establish that new entry cannot be financed, and the same-year benchmark for 2029/2030 has not been posted. What the analysis shows is a sustained path below the most recent posted value across the Delivery Years examined.

43. The prospect that lower prices may eventually slow entry does not protect capital committed before the price effect becomes apparent. When PJM proposed the Reliability Pricing Model it recognized that a centralized forward procurement obviates the need for each Load Serving Entity to arrange its own coverage and for each developer to find its own buyer. PJM rejected the alternative proposals that would have relied on voluntary bilateral markets, telling the Commission that a voluntary forward market “would not require LSEs to arrange to cover their entire load obligation until the short-term residual auction,” that this “is essentially what exists in PJM today, with the option but not the obligation to contract forward for capacity,” and that “as has been experienced to date, this approach creates fundamental inconsistencies between forward market results and reliability requirements.” PJM Interconnection, L.L.C., Docket Nos. Nos. ER05-1410-000 and EL05-148-000, Transmittal at 22 (Aug. 31, 2005). The demand curve permits a merchant developer to sell capacity without first identifying a specific buyer. Removing forecast load from the procurement quantity reduces the demand available through the centralized auction and returns a developer to the bilateral arrangement PJM declined to rely on.

44. A resource relying on Bring Your Own New Capacity assumes bilateral counterparty exposure for ten consecutive Delivery Years against a counterparty it must identify, assess and monitor. Under the Reliability Pricing Model a Load Serving Entity satisfies its obligation by paying the Locational Reliability Charge, and Attachment DD section 5.12 addresses resource nonperformance and replacement with PJMSettlement as the contracting party. On the compensation side of Interim Resource Adequacy Service, Attachment DD-4 section X(b)(iii) provides that where PJM facilitates billing the arrangement remains bilateral, PJMSettlement is not a contracting party, and PJM, PJMSettlement and the Members assume no responsibility for a party’s failure to pay. The filing does not address the counterparty exposure arising from the bilateral procurement toward which it directs New Large Load.

45. PJM has separately identified credit and collateral issues associated with long-term bilateral capacity arrangements. In its March 4, 2026 *Credit and Securitization Overview*, prepared for the Reliability Backstop Procurement, PJM reported that 41 percent of generation owners and 77 percent of Load Serving Entities are sub-investment grade, and that it had identified limitations in the credit information available for data-center counterparties, recording that their profile “remains opaque due to lack [of] clarity regarding the specific contracting entity.” PJM, *Credit and Securitization Overview* 7, 8 (Mar. 4, 2026), available at <https://perma.cc/4BVQ-WDTR>. That analysis addresses the proposed fifteen-year backstop contract rather than a Bring Your Own New Capacity arrangement. It identifies credit issues that may also arise in a ten-year bilateral capacity commitment.

Sensitivity to uncertain implementation and market outcomes

46. The results depend on the share of New Large Load that arranges Bring Your Own New Capacity, whether the capacity supporting it is additional to the entry already projected, and how much of the Final RBP Target is allocated to post-baseline load. None is resolved when the Demand Curve is set. The following cases hold every other input at the values

stated at paragraph 37 and vary only those three. Each figure is the clearing price with the Excluded Amount applied.

Case	2030/31	2031/32	2032/33
No BYONC coverage	\$206.02	\$178.07	\$156.79
BYONC half; capacity incremental to observed growth	\$209.71	\$182.60	\$163.22
BYONC half; capacity within observed growth	\$521.34	\$554.72	\$554.72
Half the RBP Target allocated to post-baseline load	\$267.53	\$228.35	\$199.46

[Derived, scenario. 2029/2030 is omitted: the collar sets the price in that year and, for the reasons at paragraph 32, no Bring Your Own New Capacity arrangement is assumed. Appendix A.6 sets out each case and the intermediate coverage levels.]

47. Where the Demand Curve moves right without additional supply, the price moves materially. Where the capacity supporting Bring Your Own New Capacity is already among the projected additions, restoring the covered load to the Demand Curve adds nothing to supply that was not already there. Allocated RBP UCAP MW work the same way. The backstop quantity is in the zero-price block whether or not it is allocated to anyone, so allocating it restores load to the Demand Curve without adding a megawatt of supply.

48. The two mechanisms are not equivalent, and the difference matters. Under a Bring Your Own New Capacity arrangement the load returns to the Demand Curve and capacity arrives with it; both sides of the pairing are new. Under an allocation of RBP UCAP MW only the demand side is new. The capacity was procured earlier, against a different forecast, and entered the auction without load of its own.

49. That difference follows from how the two quantities are determined. The Reliability Backstop Procurement is sized on load growth from the 2026/2027 to the 2028/2029 Delivery Year. Affidavit of Danielle Croop on behalf of PJM Interconnection, L.L.C. ¶¶ 43, 46, Docket No. ER26-3380-000 (July 31, 2026) (“Croop Aff.”). Attachment DD-4, section IX then allocates the entire Final RBP Target pro rata across Electric Distributor zones, and within each zone to New Large Loads — load in service after June 1, 2027 and above the 2028/2029 baseline. No provision allocates any part of the Target to the load whose growth justified procuring it.

50. An allocation of any size implies that the backstop capacity was not consumed by the load it was procured against, which is the configuration Dr. Shanker identifies in the backstop proceeding: capacity in the auction without the load that justified it. Shanker Aff. paragraphs 13 to 17, Docket No. ER26-3380-000 (Aug. 21, 2026). The same Reliability Backstop Procurement capacity first enters the auction supply stack and may then support an allocation that restores different load to the Demand Curve, without adding further supply. PJM would procure capacity for load that did not materialize and apply that capacity to reduce what it buys against load that did.

51. The Excluded Amount produces the widest range of modeled outcomes. At half the Table B-9b proxy the modeled 2030/2031 price is \$521.34; at three-quarters it is \$286.65.

[Derived; Appendix A.5.] One quarter of the proxy separates a clearing near the Point 1 price from one near half that price.

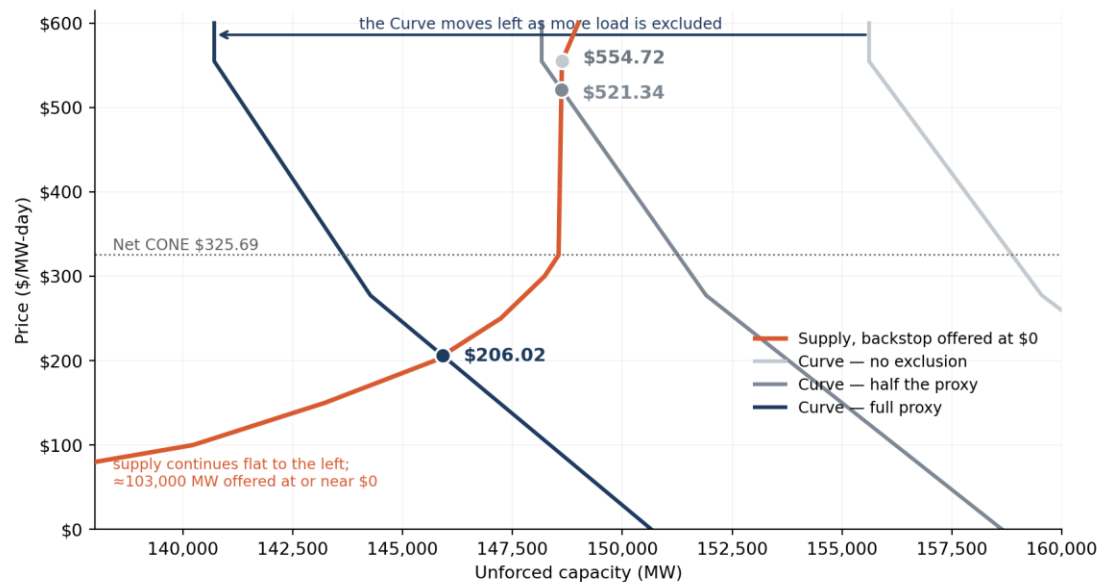


Figure 4. The Demand Curve and the clearing price at three levels of the Excluded Amount, 2030/2031. Derived, scenario. Supply is the offer curve at Appendix A.4 shifted by two years of additions and by the illustrative backstop quantity offered at \$0/MW-day. The three Curves carry identical price coordinates and differ only in the quantity excluded: none, half the Table B-9b proxy, and the full proxy.

52. Backstop participation in the 2029/2030 Base Residual Auction is a further variable. Awards under the procurement are expected after the deadline for a Notice of Intent to Offer into that auction, and Attachment DD section 18.6(a) contemplates that resources without such a notice enter through an Incremental Auction instead. I therefore take no backstop capacity into the 2029/2030 Base Residual Auction as the base case, and state full participation as a sensitivity at Appendix A.5.

53. PJM states that a matched Bring Your Own New Capacity arrangement produces a “symmetrical, one-for-one addition” and “an effectively price-neutral outcome.” Transmittal at 58. That characterization holds in one configuration among several the Tariff permits, and PJM offers it without identifying the conditions on which it depends or examining the configurations in which it does not hold. A demonstration that the design is neutral in a single case is not a demonstration that it is neutral. The scenarios above show that the outcome depends on three matters the filing does not address.

54. The first is quantity. Restoring a megawatt of load moves the Curve right by the applicable percentage multiplier, which is 101.5 percent on the segment where these auctions clear, while the supporting capacity moves supply right by the megawatt itself. On that measure the claim substantially holds, and I do not contend that matched capacity suppresses price.

55. The 2030/2031 column of the table at paragraph 46 shows how the price moves as coverage changes. With no Bring Your Own New Capacity and new entry arriving at the rate observed over the past four Delivery Years, the modeled price is \$206.02. Where half the excluded load arranges Bring Your Own New Capacity and that generation is incremental to the entry already expected, the price rises only to \$209.71: load returns to the Demand Curve and supply increases with it, so the two changes largely offset. Where half the excluded load arranges Bring Your Own New Capacity from resources that were expected to enter in any event, the price rises to \$521.34, because the load returns to the Demand Curve and nothing is added to supply. Where half the Final RBP Target is allocated to post-baseline load, the price is \$267.53, for the same reason applied to a smaller quantity. *[Derived; Appendix A.6.]* The price responds to whether the megawatts that return load to the Demand Curve are new, not to whether the load is covered.

56. On its face, a New Large Load in a constrained Locational Deliverability Area that contracts with capacity outside that area may remain excluded from the Demand Curve for its own area even though it is restored to the Region-wide Demand Curve. The Excluded LDA New Large Load Amounts definition subtracts only load “in an arrangement with BYONC in the Locational Deliverability Area.” Tariff, Attachment A. In that configuration the arrangement would be matched at the Region level and unmatched where the constraint binds.

57. Attachment DD-4, section VII(h) adds a fourth possibility that I do not model. It permits a New Large Load to contract in excess of its current eligible amount in anticipation of expected growth, with the full quantity offered in the first auction in which the load is on the Demand Curve. The capacity may therefore precede the load, in which case the prices shown in the table above would be lower than my simulation indicates.

58. The filed record does not establish whether the proposed changes will meet the objective of the design they modify: to provide, on average over an asset’s useful life, the Net Cost of New Entry. PJM’s filing does not identify the threshold at which the exclusion begins to affect price, provide a sensitivity around the Excluded Amount, evaluate the exclusion together with the zero-priced backstop supply available in the same auctions, or test the resulting price against Net Cost of New Entry — the figure PJM itself calculates to represent the cost of a new reference resource, and the anchor from which the Demand Curve’s price coordinates are derived.

Investment implications

59. A price below Net Cost of New Entry leaves a prospective entrant without the revenue to bring an investment forward, and may also affect an existing resource where its expected market revenues no longer cover its going-forward costs. PJM would continue to include the associated load in determining the Region’s reliability needs while procuring less capacity through the auction to meet them.

60. For a resource already in service, the modeled reduction reaches approximately \$127,276 per UCAP MW-year by 2030/2031 and increases in later years — a shortfall measured against the revenue the Reliability Pricing Model was designed to deliver. It does

not reflect a change in the resource's performance or a decline in the Region's need for capacity. The same fleet remains available, and the market remains short of its Reliability Requirement under both modeled cases. The difference is the quantity PJM procures and the price at which the market clears. The proposal provides no direct compensation to existing resources for that reduction.

61. A prospective investor commits capital only where expected revenues support the commitment. Under the full-proxy cases described in paragraph 42, the modeled price falls below the most recently posted Net Cost of New Entry beginning in 2030/2031 and continues to decline. Some other cases remain above that benchmark. The results therefore do not establish a single price outcome, but they do show several plausible paths on which auction revenues fall below the benchmark used to assess new entry.

62. The magnitude of the effect depends on future supply, backstop participation, Bring Your Own New Capacity coverage, and the allocation of RBP UCAP MW. None of those inputs will be known when an investor commits capital. An investor financing a long-lived generating asset would reflect the resulting range of potential capacity revenues in its required return, in financing terms, or in both. That is the uncertainty PJM said the Reliability Pricing Model would remove: in 2005 PJM told the Commission that recognizing capacity value above the reserve margin would dampen volatility, "making estimates of future prices more reliable and allowing investors to make reasonable predictions of revenue streams," and would thereby "reduce[] . . . the return required by investors resulting in savings in consumer costs." *Id.* at 24.

63. The resource-adequacy effect reaches both entry and retention. A sustained price below the most recently posted Net Cost of New Entry benchmark weakens the signal for new investment. Lower expected capacity revenues may also affect retention, where an existing resource's expected market revenues no longer cover its going-forward costs. Measured against the Reliability Requirement before the exclusion, the modeled market is short in every Delivery Year examined, and Appendix A.5 shows the shortfall widening across the period. New generation becomes existing generation, so the same market design reaches a resource first as a new entrant and later as an existing unit: capacity supporting a Bring Your Own New Capacity arrangement offers as a price taker for ten Delivery Years and then competes as merchant capacity, and backstop capacity does so for fifteen. The modeled price reduction is therefore not merely a redistribution of capacity-market revenues between sellers and buyers. It is the means by which the reduced procurement target reaches decisions to build, finance, retain or retire the resources PJM continues to rely on to serve the full load forecast.

Consequences for reliability and for the design of the market

64. Under the stated scenario the procurement quantity has substantially stopped responding to load growth. Across 2028/2029 through 2032/2033, peak load net of load in an FRR Service Area grows 31,026 MW while the Reliability Requirement net of the Excluded Amount moves 584 UCAP MW. Measured from 2029/2030, the first Delivery Year in which the exclusion operates, the same load base grows 25,478 MW while the net

requirement grows 685 UCAP MW. *[Derived; Appendix A.30. Both quantities are stated net of load in an FRR Service Area, consistent with the Reliability Pricing Model procurement base.]* PJM would plan the system for the larger figure and buy against the smaller one.

65. If the Commission accepts the filing as proposed, PJM constructs the 2029/2030 Demand Curve in December 2026 using the Excluded Amount. The exclusion is applied before the later availability determination under Attachment DD-4, section IV(b), and applies whether or not Interim Resource Adequacy Service is ever called. No provision automatically restores the procurement quantity if it is not, and the mechanism carries forward in each subsequent auction in which qualifying load remains above the 2028/2029 baseline.

66. The structure is continuing rather than temporary. PJM states that it “is not proposing an end date to the IRAS program,” and that it “will continue to maintain the Large Load Registry” regardless of whether the Region has maintained capacity sufficient to meet the PJM Region Reliability Requirement for three or more years. Transmittal at 72. Where the Region is not short for three consecutive Delivery Years, PJM describes the program as one that “effectively goes to sleep,” with existing Bring Your Own New Capacity “relieved of their RPM participation obligations” and all New Large Loads becoming Large Loads. *Id.* The definition then resets the vintage to load entering service “after June 1 of the first Delivery Year” in which the Region is again short. *Id.*; Proposed Tariff, Definitions — New Large Load. The market rule survives the dormancy: qualifying load can again be removed from the quantity PJM procures while remaining part of the system PJM plans and operates. The filed Tariff does not state when previously excluded load returns to the procurement base.

67. A lower clearing price produced by reducing the quantity procured does not establish that the cost of serving the same load reliably has declined. Under the stated full-proxy scenario the quantity involved grows across the period examined. The Excluded Amount rises from 5,223 UCAP MW in 2029/2030 to 28,060 UCAP MW in 2032/2033, or from 3.5 percent to 16.4 percent of the Reliability Requirement before the subtraction. *[Derived; Appendix A.3.]* That final figure is the capacity-terms equivalent of 30,394 MW of large-load growth net of load in an FRR Service Area, which is 98 percent of the total net load growth reported at paragraph 64. *[Derived.]* The long-term consequence is a feedback problem: load growth increases the system PJM must plan to serve; the Excluded Amount prevents a corresponding increase in what the Reliability Pricing Model procures; a reduced procurement quantity lowers the price signal for entry and retention; and a weaker investment signal can leave fewer resources available when the forecast load materializes. The filing makes the feedback possible, establishes the mechanism on a continuing basis, and provides no analysis of its effect on long-term resource adequacy.

IV. PLANNING ON GROSS LOAD AND PROCUREMENT NET OF EXCLUDED LOAD

The load stays in the reliability model

68. Consumers may pay lower Reliability Pricing Model charges in the near term, but that reduction results from buying less capacity, not from a reduction in the resources needed to serve the load or in the cost of providing them. PJM made the connection between reserve levels and consumer costs when it originally proposed the model more than twenty years ago. It told the Commission that recognizing value in capacity above the reserve margin dampens volatility and allows “investors to make reasonable predictions of revenue streams,” which “reduces reserve and capacity price volatility and consequently the return required by investors resulting in savings in consumer costs.” PJM Interconnection, L.L.C., Docket Nos. ER05-1410-000 and EL05-148-000, Transmittal at 24 (Aug. 31, 2005). PJM added that “additional reserves due to the VRR curve result in lower capacity and energy costs to consumers,” and that “[e]xcess reserves also further reduce the probability of loss of load and discourage withholding by suppliers to increase profits.” *Id.* at 24-25. It supported that with a table showing capacity cost falling as the reserve level cleared higher, and explained that the capacity savings “will be augmented by energy cost savings” because, as both Mr. Ott and Professor Hobbs explained, “the commitment of capacity at a higher reserve level will tend to decrease energy market prices.” *Id.* at 74 (citing Ott Affidavit at 23-26). Reducing the reserves procured, as this filing proposes, should be expected to have the opposite result across each of those measures: a lower capacity charge, and higher energy costs, higher scarcity costs, and a higher probability of loss of load. The filing does not analyze that trade.

69. PJM’s reliability model includes New Large Load, PJM serves that load in real time, and the proposal removes it only from the quantity PJM procures. The proposal does not amend the Reserve Requirement Study, the ELCC study, or the Reliability Assurance Agreement schedules governing capacity obligations. Its only planning-parameter change adds the Excluded Amounts to the quantities PJM posts under Attachment DD section 5.11(a)(iii).

70. Load that will be served must be planned for. That treatment creates the central disconnect: the same load sets the planning parameters, carries the resulting capacity obligation, and is then removed from the quantity procured.

The shape change and its drivers

71. PJM used hourly load profiles derived from the 2026 PJM Load Forecast for the 2029/2030 Reserve Requirement and ELCC studies, the same forecast vintage used for 2028/2029. PJM, 2026 Long-Term Load Forecast Report (Jan. 14, 2026), available at <https://perma.cc/AHU2-KQ29>; PJM, *IRM, FPR and ELCC for the 2029/2030 BRA*, Markets and Reliability Committee 3 (Aug. 19, 2026), available at <https://perma.cc/2GK5-GHQC>. The load shape changed: summer extreme loads declined relative to the annual peak, while winter extreme loads increased. PJM concluded that the 2029/30 load shapes placed upward pressure on winter risk. *Id.*

72. Comparing the top twentieth percentile of the seasonal peak distributions across the two studies, PJM identifies the following winter driver: “Data Center Loads: rapid data center growth is resulting in more load in January than the preceding summer.” *Id.* at 16.

73. PJM’s sensitivity analysis isolates the load-shape effect from the other modeled inputs. The load shapes increased the Installed Reserve Margin by about 0.4 percentage points in the sensitivity, while “[o]ther inputs to the 2029/30 BRA case, particularly the updated Resource Portfolio, have negligible impact on the IRM.” *Id.* at 17. The load shapes also increased winter loss-of-load-hour risk by about 8 percentage points. PJM further reports that other inputs, “particularly the updated Resource Portfolio, put downward pressure on summer risk (which results in more winter risk).” *Id.* at 18. Both movements raise the winter share.

74. PJM’s sensitivity attributes the parameter movement to the load shapes collectively rather than to the resource portfolio. PJM separately identifies data-center growth as one contributor to those shapes. The sensitivity does not isolate the data-center component from the other load-shape changes, and this opinion does not attribute the full parameter movement to data centers.

What the shape change did to the parameters

75. Winter risk rose across every measure between the two studies:

Seasonal winter share of	2028/2029 BRA	2029/2030 BRA
Loss of load expectation	60.5%	77.9%
Loss of load hours	76.6%	89.4%
Expected unserved energy	90.2%	96.3%

Id. at 7.

76. Most ELCC Class Ratings fell as the winter risk share increased. PJM states that a “[m]ajority of ELCC Classes see a decrease in rating due to higher winter risk share,” and that the classes with the larger decreases “are those with worse performance in winter risk hours relative to summer risk hours.” *Id.* at 6. Gas CT shows the largest movement, from 67 to 59 percent.

ELCC Class	Assumed ICAP	Rating change	Accredited capacity
Gas CC	59,922	–3 pts	–1,798
Gas CT	11,378	–8 pts	–910
Solar Tracking Panel	14,900	–3 pts	–447
Gas CT Dual Fuel	14,205	–3 pts	–426
Coal	31,304	–1 pt	–313
Storage classes	7,144	–2 pts	–143
Onshore Wind	3,599	+3 pts	+108

[Derived: installed capacity by class at 4; rating changes at 6.] UCAP MW. The table shows the composition of the movement. It does not reconcile to the pool-wide factor, which the model solves rather than calculating as a weighted average of published class ratings.

77. The same changes reduced the Pool-Wide Average Accredited UCAP Factor from 0.7834 to 0.7668, which PJM attributes to “[h]igher winter risk share,” and the Forecast Pool Requirement fell from 0.9401 to 0.9232, which PJM attributes to “[l]ower accreditation of resources.” *Id.* at 9. The Installed Reserve Margin rose from 20.0 to 20.4 percent on “[h]igher extreme winter loads.” *Id.*

PJM quantifies the effect on an unchanged fleet

78. Applying the 2029/2030 parameters to the 2028/2029 assumed resource portfolio and peak load forecast, PJM reports:

Parameter	2028/2029 BRA values	2029/2030 parameters, 2028/2029 portfolio and load	Change
Assumed resource portfolio, ICAP	196,871	196,871	—
Peak Load Forecast	165,567	165,567	—
Installed Reserve Margin	20.0%	20.4%	+0.4 pts
Pool-Wide Average UCAP Factor	0.7834	0.7668	−0.0166
Forecast Pool Requirement	0.9401	0.9232	−0.0169
Accredited UCAP	154,234	150,961	−3,273
“Reliability Requirement”	155,650	152,851	−2,799
UCAP Surplus	−1,416	−1,890	−474

Id. at 19. PJM holds the assumed portfolio and the peak load forecast at their 2028/2029 values “instead of the applicable 29/30 BRA values,” so the movement in the remaining rows is attributable to the parameters alone. The installed-capacity figure is the assumed resource portfolio described at Appendix A.4, paragraph A31, a modeling input rather than capacity available in the market. The 2029/2030 assumed portfolio is 203,004 MW; this run substitutes the 2028/2029 value of 196,871 MW so that the parameter effect is isolated. PJM states the Reliability Requirement here as the Forecast Pool Requirement multiplied by the peak load forecast, assuming all load participates in the Reliability Pricing Model; the scenarios in Part I use the FRR-adjusted quantity.

79. Applying the 2029/2030 parameters to the 2028/2029 portfolio and load reduces accredited capacity by 3,273 UCAP MW. Gas CT accounts for 910 MW of the reduction on 11,378 MW of installed capacity. [Derived.] On the actual 2029/2030 portfolio, which is

6,133 MW larger, Accredited UCAP instead rises 1,429 MW year over year; PJM attributes that increase to the higher installed capacity and notes that “overall accreditation of portfolio (i.e., UCAP Factor) is lower.” *Id.* at 9. The counterfactual therefore measures what the parameter change did to the accredited value of a given fleet, not a decline in accredited capacity between the two Delivery Years. The sensitivity does not isolate the data-center component of the load-shape change. *See* paragraph 74.

80. The Forecast Pool Requirement moves in the opposite direction. Its reduction lowers the Reliability Requirement by 2,799 MW over the same interval, leaving a net tightening of 474 MW rather than 3,273 MW. PJM likewise observes that the parameters “have a small impact on the UCAP Surplus change.” *Id.* The 3,273 MW figure measures the decline in the accredited value of existing supply; the 474 MW figure measures the net effect on the balance. The figures answer different questions.

Planning on the full load and procuring against the reduced load

81. The mechanics produce an asymmetry between the load basis used to derive the planning parameters and the load basis to which those parameters are applied.

Deriving the planning parameters	New Large Load
Hourly load profiles driving the Reserve Requirement Study	included
Installed Reserve Margin	included
ELCC Class Ratings and the Pool-Wide Accredited UCAP Factor	included
Forecast Pool Requirement	included
Applying them in the procurement equation	New Large Load
Load basis to which the Forecast Pool Requirement is applied	removed
Quantity against which PJM procures	removed

82. PJM derives the Forecast Pool Requirement from the full load forecast and applies it to a load basis from which the Excluded Amount has been removed. PJM does not show that the planning parameters are inert to that removal. The question is whether the reliability model would solve to the same Installed Reserve Margin, the same ELCC Class Ratings and the same pool-wide factor if the excluded load were taken out of the load scenarios. The filing does not address it.

83. The parameters are not fixed between auctions. Between the Base Residual Auction and the Third Incremental Auction for the 2026/2027 Delivery Year, a 1.61 percent reduction in the peak load forecast accompanied an Installed Reserve Margin falling from 19.1 to 18.6 percent and a Pool-Wide Average Accredited UCAP Factor rising from 77.0 to 78.3, raising the Forecast Pool Requirement 1.32 percent. *[Derived: 2026/2027 planning parameters for both auctions.]* Several inputs changed together, so the comparison does not isolate the load basis.

84. PJM has already sought and obtained relief from accreditation volatility for capacity sellers. In Docket No. ER25-2002, PJM proposed to limit the Capacity Resource Deficiency Charge where a shortfall results from a reduction in a resource's Accredited UCAP Factor between the Base Residual Auction and the start of the Delivery Year, reducing the charge from the greater of 120 percent of the clearing price or \$20/MW-day to 100 percent of that price. PJM's stated ground was that Accredited UCAP values "may change as a result of factors that are not within the control of the resource owner, including changes in the expected patterns of resource adequacy risk on the system," and that the must-offer requirement leaves a seller unable to hedge by offering less than its full Accredited UCAP. The Commission accepted the revisions, finding that shifts in accreditation under the effective load carrying capability methodology "are driven by more complex, system-wide factors" that "may not entirely be within the control of the Capacity Market Seller." *PJM Interconnection, L.L.C.*, 191 FERC ¶ 61,203 at PP 6, 39-40 (2025). The relief applies from the 2026/2027 Delivery Year forward.

85. The changed pattern of resource adequacy risk that gave rise to that relief is the same one at issue here. PJM attributes the 2029/2030 accreditation decline to a higher winter risk share, *see* paragraphs 74 and 75, and identifies data center growth as a driver of the load shapes that produced it, *see* paragraph 72.

86. The two filings before the Commission take the further step of fixing accreditation outright. In Docket No. ER26-3380, Attachment DD section 18.2(d) values Qualifying RBP Offset UCAP MW on "the applicable ELCC Class Ratings for the 2028/2029 Delivery Year BRA," and section 18.5(e) caps a Reliability Backstop Procurement Sell Offer at 120 percent of the resource type's most recent maximum Preliminary ELCC Class Ratings for 2028/2029 through the last posted Delivery Year. In this docket, Attachment DD-4 section VII(i) fixes the Accredited UCAP of Bring Your Own New Capacity at its value "for the RPM Auction in which the BYONC cleared for the initial Delivery Year the BYONC is in an arrangement with the New Large Load." PJM fixes accreditation where a commitment depends on it, and leaves it to move where the price does.

87. For the 2029/2030 Delivery Year the quantity removed from the procurement target is 5,223.1 UCAP MW on the Table B-9b proxy. The accredited value lost by the existing fleet on PJM's counterfactual is 3,273 UCAP MW. *[Derived.]* The two arise from different causes and I draw no reconciliation between them: the first is a scenario proxy for the tariff exclusion, the second the product of the whole load-shape and parameter change.

V. CONTINUING CAPACITY OBLIGATIONS AND COST ALLOCATION

The obligation base includes the load the procurement target excludes

88. The separation between the load PJM plans for and the load it procures against is not confined to the Demand Curve. Capacity obligations are allocated on a peak load base that counts large load in full. Reliability Assurance Agreement, Schedule 8, section A provides

that for each billing month the Daily Unforced Capacity Obligation of a Party that has not elected the FRR Alternative is determined for each Zone as Obligation Peak Load multiplied by the Final Zonal RPM Scaling Factor multiplied by the Forecast Pool Requirement. Obligation Peak Load is the weather-adjusted coincident summer peak of the end-users for which the Party is responsible,

as adjusted further to include the Obligation Peak Load associated with any Large Load Adjustment that may be allocated to the Party.

RAA, Schedule 8, section A.

89. The two tariff terms do not cover the same load, and the analysis does not require them to. A Large Load Adjustment is “any MW quantity of adjustments to summer peak load at the ‘zone/area’ level and summed by Zone.” RAA, article 1. New Large Load is narrower: an end-use load with cumulative peak load of at least 50 MW at a single electrical site, entering service after June 1, 2027, and the Excluded Amounts definition further conditions it by excluding load in an FRR Service Area and subtracting load in an arrangement with Bring Your Own New Capacity or assigned Allocated RBP UCAP MW. All the analysis requires is that New Large Load sit inside the Large Load Adjustment population, so that the load removed from the procurement target still carries an obligation. The population mapping should be obtained to confirm that it does.

90. Schedule 8 allocates the quantity procured. Section B sets the Base Zonal Unforced Capacity Obligation as the zone’s share of the Preliminary Zonal Peak Load Forecast multiplied by “the RTO Unforced Capacity Obligation satisfied in the Base Residual Auction.” Section C1 sets the Final RTO Unforced Capacity Obligation as the sum of the obligations satisfied through the Base Residual and Incremental Auctions, allocated to zones on the Final Zonal Peak Load Forecast.

91. PJM amended these provisions in 2024 for the express purpose of making forecasted large load carry a capacity obligation. The revisions to Schedule 8, Schedule 8.1 and the Large Load Adjustment definition were presented to the Members Committee on June 27, 2024 under the heading “Capacity Obligations for Forecasted Large Load Adjustments.” If the Large Load Adjustment quantities assigned under Schedule 8 include the same New Large Load removed through the Excluded Amount definitions, the design would assign an obligation using the full forecast while constructing the Curve on a reduced procurement base. That population mapping should be confirmed against the currently effective Reliability Assurance Agreement, and I state the conclusion conditionally on that basis.

92. If the Large Load Adjustment population includes the New Large Load removed through the Excluded Amount definitions, that load continues to enter the obligation allocation. Its Obligation Peak Load would be counted, and its Load Serving Entity would pay a Locational Reliability Charge on that basis. Reliability Assurance Agreement, Schedule 8 builds Obligation Peak Load from the Weather Normalized Summer Peak, a historical and weather-adjusted quantity, plus “the Obligation Peak Load MW associated with any Large Load Adjustment specified for such Delivery Year.” A Large Load Adjustment is a forecast adjustment. On that construction the forecast quantity continues

to enter the obligation base while being removed from the procurement base. Because the obligation base rises with the load forecast while the procurement target does not, the ratio between them falls as follows.

Delivery Year	Peak load less FRR load	Reliability Requirement net of the exclusion	Ratio
2028/29	154,038	142,208	0.9232
2029/30	159,586	142,107	0.8905, down 3.5%
2030/31	170,264	142,135	0.8348, down 9.6%
2031/32	177,716	142,287	0.8006, down 13.3%
2032/33	185,064	142,792	0.7716, down 16.4%

[Derived, scenario. Both columns are stated net of load in an FRR Service Area, consistent with the Reliability Pricing Model obligation base. Excluded Amounts on the Table B-9b proxy at paragraph 37; Forecast Pool Requirement held at 0.9232; FRR share held at its 2028/2029 value of 6.9634 percent.]

93. The reduction is not confined to the zones where the growth is concentrated. Section B allocates the reduced Reliability Pricing Model obligation to zones on peak load forecast shares, so a zone with little or no New Large Load receives a proportionately reduced obligation on the same basis as a zone where the growth is concentrated. I state that at the level of the obligation allocation and not at the level of charges, which are locational: Final Zonal RPM Scaling Factors and Final Zonal Capacity Prices differ by zone, and load in an FRR Service Area is outside the mechanism described at paragraphs 88 to 93 entirely.

Limits of the opinion

94. New Large Load should remain in PJM’s reliability studies because load that will be served must be reflected in the model and in the resulting planning parameters. The concern addressed here is not its inclusion in those studies. Nor is data center load the sole cause of the change in load shape: PJM also identifies electrification of heating as a winter driver and rooftop solar growth as a summer driver. *Id.* at 16, and paragraph 74 states what the sensitivity does and does not establish. Finally, no load is charged for capacity that PJM does not procure; total obligations equal the quantity satisfied in the auctions. The issue is the quantity PJM purchases.

Relief

95. PJM should clarify three points.

First, PJM should state whether Attachment DD section 5.10(a) applies a Forecast Pool Requirement derived from the full load forecast or from the load basis net of the Excluded

Amounts. If it uses the former, PJM should explain why it applies a conversion factor solved on one load basis to another.

Second, PJM should explain how it reconciles the reduced Reliability Pricing Model obligation with an obligation base that continues to include the excluded load under Reliability Assurance Agreement, Schedule 8, section A, and whether it intends a corresponding revision to that Schedule.

Third, PJM should state the reserve margin it expects the PJM Region to carry, measured against served load rather than the reduced procurement target, in each Delivery Year in which the exclusion operates.

VI. THE ABSENCE OF A BINDING SUBSTITUTE, AND THE COMPENSATION DESIGN

Comparison of the procurement reductions

96. PJM has established several ways to reduce the quantity of capacity it procures, and each of them requires something in return. The Fixed Resource Requirement Alternative, the Peak Shaving Adjustment and Price Responsive Demand each condition the reduction on a defined commitment or performance condition. The Excluded Amounts do not. Whether the exclusion is an appropriate continuing adjustment to the procurement base, rather than one more demand-side mechanism, turns on that difference.

97. The Excluded Amounts operate by formula. As Appendix B explains, New Large Load above the 2028/2029 baseline holding neither Bring Your Own New Capacity nor Allocated RBP UCAP MW is subtracted from the Curve without any election, application, approval, or finding by PJM. *See* Appendix B. The load appears in the forecast and the subtraction follows.

What the Tariff requires of the comparable mechanisms

98. The Fixed Resource Requirement Alternative. An FRR Entity removes its load from the Reliability Pricing Model entirely, and must designate Capacity Resources in a quantity no less than the Forecast Pool Requirement multiplied by its allocated share of the Preliminary Zonal Peak Load Forecast. RAA, Schedule 8.1, section D.2. The plan must be approved, must run for a multi-year term, and must comprise only Capacity Performance Resources and Seasonal Capacity Performance Resources. *Id.* sections C.1, D.1.1. Deficiency is charged at the Point 1 price of the Variable Resource Requirement Curve. *Id.* section F.2. For the 2028/2029 Delivery Year the FRR reduction was 10,863.8 UCAP MW, subtracted on the same worksheet line as the Excluded Amounts would be. *See* Appendix A.2, paragraph A15.

99. The Peak Shaving Adjustment. A Peak Shaving Adjustment is “a load forecast mechanism that allows load reductions by end-use customers to result in a downward adjustment of the summer load forecast for the associated Zone.” Tariff, Attachment A. It requires a program sponsored by the Relevant Electric Retail Regulatory Authority, compliance with Attachment DD-2, and exclusivity: “[a]ny End-Use Customer identified in an approved peak shaving plan shall not also participate in PJM Markets as Price Responsive Demand, Demand Resource, Base Capacity Demand Resource, Capacity Performance Demand Resource, or Economic Load Response Participant.” *Id.*

100. Price Responsive Demand. Price Responsive Demand is end-use customer load registered by a PRD Provider under Reliability Assurance Agreement, Schedule 6.1, with metering capability specified in the PJM Manuals. Tariff, Attachment A. It requires an approved PRD Plan, a registered Provider, a Firm Service Level, a Maximum Emergency Service Level, and a stated PRD Reservation Price, defined as “an RPM Auction clearing price identified in a PRD Plan for Price Responsive Demand load below which the PRD Provider desires not to commit the identified load as Price Responsive Demand.” *Id.*

101. Price Responsive Demand provides the closest tariff comparison. Its reduction of the Reliability Requirement is *price-conditioned and self-executing*: the reduction applies only where the Reservation Price is at or below the clearing price. Attachment DD, section 5.4(c)(3)(i). A PRD Provider therefore cannot reduce the quantity PJM buys on the strength of an expectation. It must name a price at which it will stand behind the reduction, and if the market clears below that price the reduction does not occur.

102. The four mechanisms compare as follows.

Mechanism	What the Tariff requires before the procurement target is reduced
Fixed Resource Requirement	Approved multi-year plan; designated Capacity Resources covering the entire obligation; deficiency charged at the Point 1 price
Peak Shaving Adjustment	RERRA-sponsored program; Attachment DD-2 compliance; exclusivity against other participation
Price Responsive Demand	Approved PRD Plan; registered Provider; Firm Service Level; Maximum Emergency Service Level; stated Reservation Price; reduction applies only when the clearing price equals or exceeds the stated Reservation Price
Excluded New Large Load Amounts	Appearance in the load forecast

103. Attachment DD, section 5.4(c) addresses Price Responsive Demand and the Excluded Amounts in the same clause, directing PJM to compare the requirement “including any reductions to such reliability requirements as a result of any Price Responsive Demand with a PRD Reservation Price equal to or lower than the clearing price in the Base Residual Auction for such Delivery Year and any adjustments associated with Excluded RTO New

Large Load Amounts or Excluded LDA New Large Load Amounts.” The price condition attaches to one and not the other, in a single sentence.

104. The Tariff contains interaction rules for the Peak Shaving Adjustment, Price Responsive Demand, Demand Resources and demand-side Bring Your Own New Capacity, but not for the Excluded Amount. The Peak Shaving Adjustment definition bars an end-use customer in an approved plan from also participating as Price Responsive Demand or as a Demand Resource. Attachment DD-4, section VI(a)(2) conditions demand-side Bring Your Own New Capacity on locations “not previously supported [by] a Capacity Resource, a Peak Shaving Adjustment, or Price Responsive Demand.” Neither Excluded Amounts definition contains any such rule. A New Large Load whose site already carries a Peak Shaving Adjustment is not excluded from the Excluded Amount on that account, and nothing nets the two.

105. PJM has also stated the standard by which conditions of this kind are judged. In sustaining the RERRA-sponsorship limitation on the Peak Shaving Adjustment, the Commission accepted that the requirement gives PJM greater confidence in the durability of the reduction. *PJM Interconnection, L.L.C.*, 167 FERC ¶ 61,114 at P 28 (2019). The Excluded Amounts are permanent as to the Tariff and conditional as to any individual load — the load may obtain Bring Your Own New Capacity at any time and cease to be excluded — which is the opposite of the durability the Commission approved.

106. Nothing reverses an Excluded Amount for non-performance. Where Interim Resource Adequacy Service is called and the load does not reduce, no provision restores the megawatts to the Demand Curve for the auction already completed. The vintage-date provision may affect later Delivery Years, but its treatment of previously excluded load is unclear, as Appendix B explains. Where the service is never needed, the same is true.

107. Bring Your Own New Capacity is not practically available for the 2029/2030 Delivery Year. PJM states that the Base Residual Auction for that year “is scheduled to commence on December 9, 2026, i.e., within 60 days from the requested effective date of this filing.” Transmittal at 62. The reporting deadline under Attachment DD-4, section VII(c) is fifty days before commencement, or October 20, 2026. Even if the Commission were to act by that date, the filing provides no meaningful interval in which to establish the Large Load Registry, form and verify a ten-year arrangement, and report that arrangement before the auction. I therefore assume that no New Large Load holds Bring Your Own New Capacity for the 2029/2030 Delivery Year. The exclusion nonetheless applies to that auction in full.

The exclusion does not depend on the IRAS availability test

108. The shortfall test does not condition the exclusion. The Excluded RTO New Large Load Amounts formula subtracts the 2028/2029 baseline and post-2028/2029 New Large Load supported by BYONC or assigned Allocated RBP UCAP MW. New Large Load above the baseline with neither form of coverage is removed by formula without a section IV(b) finding. The treatment of partially covered load remains ambiguous; that ambiguity does not change the point that the exclusion occurs before the shortfall test.

109. The quantity removed and the quantity the service can deliver are computed by different methods and need not be equal. The Excluded Amount is “converted in UCAP terms by using the Forecast Pool Requirement.” Tariff, Attachment A. That factor states the capacity required per megawatt of load; it does not measure the contribution a curtailable load makes during the hours in which resource adequacy is at risk. Section IV(b) separately determines how much Interim Resource Adequacy Service must be available, by comparing committed capacity to the PJM Region Reliability Requirement determined before the Third Incremental Auction, divided by the Pool-wide Accredited UCAP Factor. That determination may call for the whole of the Eligible New Large Load Amounts under section IV(b)(i), part under IV(b)(ii), or none under IV(b)(iii).

110. The ratio between those two quantities is the share of the removed load that converts into a reliability contribution. For a Demand Resource the analogous ratio is set by an ELCC Class Rating derived from a probabilistic study of the resource’s contribution during risk hours, 90 percent for 2029/2030, and is confirmed by capacity testing. For Interim Resource Adequacy Service no such rating is struck. The Excluded Amount leaves the Demand Curve in full, four years before the section IV(b) determination is made, on a formula that contains no reference to the shortfall against which the service is measured. The filing supplies no analysis of the relationship between the two quantities.

111. The three determinations occur years apart. PJM applies the exclusion when it constructs the Curve for the December 2026 Base Residual Auction for the 2029/2030 Delivery Year. Section IV(b) determines annual availability after the Third Incremental Auction for that Delivery Year, in February 2029. During the Delivery Year, PJM separately determines whether to issue an Interim Resource Adequacy Service Action and how much load reduction to request.

112. No provision restores excluded megawatts when the shortfall fails to materialize. By the time section IV(b)(iii) determines that PJM “does not need any Eligible New Large Loads to be available,” PJM has already reduced the Curve and completed the auction. Mr. Pilon confirms that the framework “does not require PJM to reduce affected load whenever an IRAS requirement exists,” Pilon Aff. ¶ 22, and that PJM will establish the operational mechanics through later Manual 13 revisions, *id.* ¶ 24.

The proposed IRAS compensation

113. Attachment DD-4, section X(a) sets the Interim Resource Adequacy Service rate at 50 percent of the Non-Performance Charge Rate specified in Attachment DD, section 10A(e). An Eligible New Large Load may elect a lower rate or waive compensation entirely.

The formula

114. Section 10A(e) states the Non-Performance Charge Rate as follows:

For Capacity Performance Resources and Seasonal Capacity Performance Resources, the Non-Performance Charge Rate = (Net Cost of New Entry (stated in terms of installed capacity) for the LDA and Delivery Year for which such calculation is

*performed * (the number of days in the Delivery Year / 30) / (the number of Real-Time Settlement Intervals in an hour).*

115. The formula calibrates the charge to one year of Net Cost of New Entry. It states Net Cost of New Entry as a daily rate in installed-capacity terms, multiplies that rate by the number of days in the Delivery Year divided by thirty, and divides the result by the number of settlement intervals in an hour. On an hourly basis, the rate equals annual Net Cost of New Entry divided by thirty. A Capacity Performance Resource that fails to perform in each of the thirty assumed Performance Assessment Hours therefore pays approximately one year of Net Cost of New Entry. Net Cost of New Entry is a reference value used to construct the rate, not the resource’s capacity revenue, which depends on the clearing price, committed quantity, and accreditation.

116. Section 10A(e) introduces the formula with the words “For Capacity Performance Resources and Seasonal Capacity Performance Resources.” An Eligible New Large Load is neither. Section X(a) cross-references the formula without addressing that limitation. I therefore raise, but do not resolve, whether the express cross-reference carries the numerical formula beyond its stated scope.

117. Applying the 50 percent factor to the posted 2027/2028 Net Cost of New Entry produces the following.

Locational Deliverability Area	Net CONE, ICAP	Non-Performance Charge Rate	Section X(a) rate
RTO	\$68,347/MW-yr	\$2,278/MWh	\$1,139/MWh
PS / PS North	\$114,258/MW-yr	\$3,809/MWh	\$1,904/MWh
COMED	\$106,831/MW-yr	\$3,561/MWh	\$1,781/MWh
DOM	\$50,203/MW-yr	\$1,673/MWh	\$837/MWh
BGE	\$40,934/MW-yr	\$1,364/MWh	\$682/MWh

[Derived.] The locational spread reflects the Energy and Ancillary Services offset rather than the value of curtailment. Net Cost of New Entry equals Gross Cost of New Entry less that offset; Baltimore Gas and Electric therefore has the lowest rate because it has the highest offset. Zones in which large load is concentrating include those with the lowest rates.

PJM’s support for the rate

118. PJM supports the rate by analogy. It proposes “to extend the rate applicable for Pre-Emergency Load Response non-performance (and conversely for bonus payments) — 50% of the Non-Performance Charge Rate — as the maximum rate for IRAS performance,” notes that the Commission accepted that rate in PJM Interconnection, L.L.C., 195 FERC ¶ 61,253 (2026), and concludes that it “is a just and reasonable analog for the wholesale rate PJM proposes here for IRAS.” Transmittal at 102-103.

119. PJM’s rationale addresses system conditions. PJM explains that the 50 percent figure reflects that “the PJM system is at an earlier stage of emergency conditions, so the system conditions are not as severe, so the value of the load reduction, while still substantial, is also not as high as during a Performance Assessment Interval.” PJM further states that Interim Resource Adequacy Service “would be called at the emergency conditions similar to when Pre-Emergency Load Response is called today.” *Id. at 103.*

120. The filing does not separately analyze compensation for the recipient. It provides no estimate of a New Large Load’s curtailment cost, no analysis of the value of the service provided, and no comparison between the rate and the capacity charges paid by the same load. The cited precedent addresses the same numerical rate applied to different parties for a different purpose.

Limits of the analogy

121. The participants differ in four respects relevant to whether the rate accepted for one is just and reasonable when applied to the other.

Element	Pre-Emergency Load Response participant	Eligible New Large Load
How it enters	offers into the program	registered in the Large Load Registry; availability then determined under Attachment DD-4, section IV(b)
Position in the capacity market	receives a capacity payment	pays a Locational Reliability Charge
Terms known on entry	commitment, measurement and clawback are the terms of the offer	the rules did not exist when the load was sited
Order of curtailment	called after	called before

122. Registration in the Large Load Registry identifies the population to which Interim Resource Adequacy Service may apply. Attachment DD-4, section IV(b) then determines annually, after the Third Incremental Auction, whether any Eligible New Large Load Amount must be available and in what quantity. See Appendix B and paragraph 111. Neither step is elective for the load: the load does not choose registration or the result of the section IV(b) test. It may procure Bring Your Own New Capacity, which removes it from the Excluded Amount and from eligibility.

123. A Pre-Emergency Load Response participant enters voluntarily. It offers into the program, receives payment for a capacity commitment, and accepts in advance the measurement of its performance and the recovery of part of that payment if it does not deliver. The 50 percent rate forms part of an arrangement entered with knowledge of its terms and compensation.

124. An Eligible New Large Load enters from the buyer side. Its Obligation Peak Load enters the allocation under Reliability Assurance Agreement, Schedule 8, section A, and its Load Serving Entity pays a Locational Reliability Charge on that basis for every day of the Delivery Year. See paragraphs 88 to 92. The load holds no capacity commitment and receives no capacity payment.

125. The Locational Reliability Charge the load pays and the Interim Resource Adequacy Service rate it may receive are not linked by the Tariff, and I do not treat them as offsetting. Appendix A.7 sets out an arithmetic comparison of the two for a single Delivery Year.

126. PJM's stated rationale focuses on customers. PJM explains that "the non-performance rate appropriately reflects that load paid for capacity but did not get the benefit of the Pre-Emergency Load Response Program that PJM called upon at a time when the PJM system was in stressed system conditions." PJM further explains that the collected amounts are allocated to demand resources that overperformed, "with residual monies collected in certain situations reverting to LSEs that did not get the benefit of the load response service for which they paid." Transmittal at 103. Section X(a) directs the same rate away from load, to a party that also pays for capacity, for a service that the load did not purchase.

127. The operating sequence creates an additional distinction. Mr. Pilon explains, and PJM repeats, that "IRAS load reductions would now be introduced just before the Pre-Emergency Load Reduction Actions." *Id.*; Pilon Aff. paragraph 46. The Eligible New Large Load is curtailed first; the Pre-Emergency Load Response participant, which received payment for a capacity commitment, is curtailed second. The rate applied to the first-curtailed party derives from the charge applicable to the second-curtailed party.

128. This sequence also creates tension with PJM's rationale for the 50 percent figure. PJM grounds the discount in the proposition that Pre-Emergency Load Response is called at "an earlier stage of emergency conditions," when "the value of the load reduction, while still substantial, is also not as high as during a Performance Assessment Interval." Transmittal at 103. Interim Resource Adequacy Service is called earlier still. Under that reasoning, the appropriate discount would be larger rather than equal. I do not quantify that discount.

The election to zero

129. Section X(a) permits an Eligible New Large Load to accept less than 50 percent of the Non-Performance Charge Rate or to waive compensation entirely, in which case "the rate shall be zero dollars." PJM states that where credits are waived, "the wholesale IRAS rate will be reduced to zero dollars... This is a just and reasonable rate." PJM further states that the election follows "appropriate engagement with Electric Distributors," which "would occur at the state level." Transmittal at 105.

130. Section X(a) therefore allows each seller to set the wholesale rate for the service between zero and the stated ceiling. Two Eligible New Large Loads providing identical service in the same zone and hour may receive different rates. On PJM's description, the difference turns on state-level engagement rather than a difference in cost, service, or performance.

Settlement

131. PJM assumes no settlement responsibility for the compensation. The Electric Distributor compensates Eligible New Large Loads and charges “customers in its zone/area to fund any such compensation.” Attachment DD-4, section X(b)(i). If PJM facilitates billing, “such billing shall be considered a bilateral transaction between the Electric Distributor and the identified Members and PJMSettlement shall not be a contracting party to the settlement.” PJM, PJMSettlement, and the Members “will not assume financial responsibility for the failure of a party to pay any amounts owed to another party under this section.” *Id.* section X(b)(iii).

Comparison with section 10B

132. Attachment DD, section 10B applies the same 50 percent factor to a Non-PAI Event and originated in the proceeding PJM cites. Effective with the 2028/2029 Delivery Year, section 10B(a) applies to “Demand Resources and Price Responsive Demand with capacity commitments.” Section 10B(b) defines the Non-Curtailment Charge as “Performance Shortfall * 50% * Non-Performance Charge rate specified in Tariff, Attachment DD, section 10A(e).”

Element	Section 10B	Section X(a)
Rate	50% of the 10A(e) rate	50% of the 10A(e) rate
Applies to	Demand Resources and Price Responsive Demand with capacity commitments	Eligible New Large Loads, no capacity commitment
Direction	charge	credit
Triggered by	failure to curtail	curtailment
Measured against	committed capacity or Nominal PRD Value	registered peak load less an offset
Annual limit	section 10A(f-1), denominated in committed Unforced Capacity	none identified
Where the money goes	first to providers with a negative shortfall; any remainder “distributed on a pro-rata basis to LSEs that were charged a Locational Reliability Charge on the Non-PAI Event day”	to the curtailing load

133. The two provisions allocate amounts in opposite directions. Under section 10B, amounts collected from providers that failed to curtail are paid first to providers that over-curtailed; any remainder returns to Load Serving Entities that paid a Locational Reliability Charge. Under section X(a), Load Serving Entities and other customers in the zone fund a payment to the curtailing load, with no residual return. The quantity measurements also differ. Section 10B measures Expected Curtailment against committed capacity or Nominal PRD Value and limits the charge in committed Unforced Capacity terms. Section X measures

actual curtailment against registered peak load less an offset, without accreditation or capacity testing.

Comparison with capacity Demand Response

134. Both Demand Response and Interim Resource Adequacy Service may reduce load during emergency conditions, but the proposed design recognizes them differently at each step below.

Element	Demand Resource	Interim Resource Adequacy Service
Underlying load	remains in the forecast	removed from the Curve
Reduces load	only when called	only when called
Accreditation	ELCC Class Rating, 90 percent for 2029/2030	none
In the assumed resource portfolio	8,711 MW of installed capacity for 2029/2030	not modeled
Enters the market	offered into RPM as supply	effected by subtraction from the procurement quantity
Reliability studies	contribution solved in the ELCC and Reserve Requirement Studies	nothing in the proposal amends those studies
Capacity testing	required	none
Payment	capacity payment at the clearing price, subject to charges under sections 10A and 10B	50 percent of the Non-Performance Charge Rate for hours called

[Class rating and portfolio quantity from PJM, IRM, FPR and ELCC for the 2029/2030 BRA, at 4 and 5. The 8,711 MW figure is installed capacity in the assumed portfolio and is not the nominated value of committed Demand Resources.]

135. The principal difference is accreditation. A Demand Resource receives a capacity rating based on a probabilistic model of its contribution during hours of resource-adequacy risk, appears in the assumed resource portfolio, and is subject to capacity testing. An Eligible New Large Load providing the same conditional curtailment receives no corresponding ex ante capacity rating: no rating is assigned to it; it does not appear in the studies as a resource; and it undergoes no test establishing the capacity value it will provide. Actual curtailment is measured after the fact for settlement, but the mechanism makes no prior determination of the service's capacity value. Whether that difference is unduly discriminatory is a question for the Commission; what the mechanics establish is that the two are not treated alike.

136. Section IV addresses the consequence for the planning parameters. Because the proposal implements the service by removing load rather than by adding supply, the service does not enter the Reserve Requirement Study or the ELCC study, and no class

rating is assigned to it. The procurement target is reduced by an amount calculated using a conversion factor derived from a model in which the service has no capacity rating.

Limits of the opinion

137. This opinion addresses the conditions governing the procurement reduction and the support for the proposed rate; it does not address whether Interim Resource Adequacy Service may provide a useful operational tool. The comparison in paragraphs 96 to 107 rests on the cited Tariff provisions and Commission precedent and does not attribute an intent to PJM. I also do not resolve whether section 10A(e) and section 10B apply to an Eligible New Large Load. Each cross-referencing provision appears in a clause whose stated scope is Capacity Performance Resources and Seasonal Capacity Performance Resources, and an Eligible New Large Load is neither.

Relief

138. The procurement reduction for New Large Load should require a binding, self-executing commitment comparable to the PRD Reservation Price construct or, alternatively, the durability conditions applicable to the Peak Shaving Adjustment.

139. Net the Peak Shaving Adjustment. Any Peak Shaving Adjustment applicable to a registered site should be netted against the Excluded Amount, consistent with the interaction rules PJM applies in the Peak Shaving Adjustment definition and in Attachment DD-4, section VI(a)(2).

140. Support the rate or replace it. PJM should either demonstrate that a rate calibrated as a clawback from a paid, voluntary participant is just and reasonable compensation for an obligated participant that holds no capacity commitment and is curtailed ahead of it, or propose a rate derived from the cost or value of the service the Eligible New Large Load provides. The election to zero should be removed or explained, and the class limitation in section 10A(e) should be addressed.

VII. CONCLUSION

141. Interim Resource Adequacy Service addresses a real operational problem. PJM needs a means of protecting reliability if forecast New Large Load does not materialize as expected or cannot be served during stressed conditions. That objective does not resolve the market-design question examined in this affidavit: whether PJM may remove that load from the quantity it procures while continuing to include it in the studies that set the planning parameters and without identifying a corresponding adjustment to the capacity obligations allocated to Load Serving Entities.

142. The price effect follows from the auction mechanics. The Excluded Amount shifts the Curve left and steepens its sloped segments; backstop capacity offered at \$0/MW-day shifts supply right. Neither moves the price while the intersection stays on the horizontal

segment. Once it reaches a sloped segment, both do. The 2029/2030 Excluded Amount alone brings supply within 290 MW of that point.

143. Under the full-proxy scenario described in paragraph 42, the exclusion reduces the capacity revenue supporting both new investment and continued operation by approximately \$127,276 per UCAP MW-year in 2030/2031, and the price falls below the most recently posted Net Cost of New Entry from that Delivery Year forward. Over the same period the procurement quantity ceases to track the load PJM must plan and operate the system to serve: peak load net of load in an FRR Service Area grows 31,026 MW while the Reliability Requirement net of the Excluded Amount moves 584 UCAP MW.

144. The numerical results are scenarios rather than forecasts. They show the direction and range of the price effect under the stated assumptions concerning the New Large Load proxy, backstop participation, supply additions, Bring Your Own New Capacity, Allocated RBP UCAP MW, and the offer curve. PJM's filing does not identify the threshold at which the exclusion begins to affect price, provide a sensitivity around the Excluded Amount, or evaluate the exclusion together with zero-priced backstop supply available in the same auctions.

145. My analysis complements and extends the timing concern Dr. Shanker raises in the Constellation limited protest. He explains how backstop supply can enter the auction at zero before the associated load materializes. This affidavit addresses the demand side of that interaction. To the extent related RBP capacity is not allocated to the same load under Attachment DD-4, section IX, the Excluded Amount removes forecast load from the Curve while that capacity remains in the supply stack. The two mechanisms then operate on opposite sides of the same auction and press the clearing price in the same direction.

146. Five unresolved features of the proposed design warrant Commission attention.

147. PJM states in its 2028/2029 auction report that a price cap below the established Curve "can reduce the amount of investment, and therefore supply" in the Region. It ties market effectiveness to durability and identifies "backstop procurement mandates and price cap proposals" among the interventions that lead investors to discount the revenue stream. In the backstop proceeding, PJM proposes a maximum willingness to pay of \$555/MW-day for capacity it will then require to offer into RPM at \$0/MW-day. The filing does not reconcile the resulting reduction in the procurement quantity and potential clearing-price effect with the durable price signal PJM identifies as necessary.

148. The filing does not test the resulting price against Net Cost of New Entry. That figure is PJM's own estimate of the cost of bringing a new reference resource to the system, and the price coordinates of the Variable Resource Requirement Curve are derived from it. PJM proposes to modify the Curve without showing whether the prices it would produce remain adequate measured against the benchmark on which the Curve itself is built.

149. PJM uses New Large Load in the load shapes from which it determines the Installed Reserve Margin, ELCC Class Ratings and Forecast Pool Requirement, but removes the Excluded Amount from the procurement quantity. The filing identifies no corresponding

removal from the Obligation Peak Load used to allocate capacity obligations. *See* paragraphs 69 to 93. It therefore does not explain whether a conversion factor derived from the full load forecast remains appropriate when applied to a procurement quantity net of that load, or why load that continues to carry a capacity obligation should be removed from the quantity procured against it.

150. The Fixed Resource Requirement Alternative, Peak Shaving Adjustment and Price Responsive Demand condition reductions in the procurement target on defined commitments or performance terms. Price Responsive Demand also conditions the reduction on a price stated by the provider in advance. *See* paragraphs 95 to 106. Interim Resource Adequacy Service, by contrast, reduces the procurement target when load enters the forecast without requiring a comparable binding commitment. The filing does not explain this difference.

151. Section X(a) sets the Interim Resource Adequacy Service rate at 50 percent of a charge benchmarked to one year of Net Cost of New Entry and applied to capacity resources with capacity commitments. An Interim Resource Adequacy Service provider has no capacity commitment, receives no capacity-market payment for the service obligation, pays a Locational Reliability Charge through its Load Serving Entity, and is curtailed before the capacity-market participants whose performance charge supplies the benchmark. *See* paragraphs 113 to 136. An Eligible New Large Load may also elect a rate of zero. PJM relies principally on the Commission's acceptance of related penalty and compensation constructs but does not explain why those constructs support compensation for an Interim Resource Adequacy Service provider with materially different obligations and economics.

152. Interim Resource Adequacy Service may prove a useful operational backstop. The present record, however, does not establish an equivalence between the reduction in the quantity PJM procures and any accredited or binding commitment substituting for the capacity no longer bought. Until that equivalence is shown, the procurement reduction rests on the appearance of load in a forecast rather than on a resource-adequacy commitment the Tariff can enforce. I recommend that the Commission require PJM to resolve these matters before the exclusion first operates in the 2029/2030 Base Residual Auction.

APPENDIX A — AUCTION MODEL, DATA AND SENSITIVITIES

A.1 Tariff and Curve mechanics

A1. Attachment DD, section 5.10(a) of the proposed Tariff sheets establishes the Variable Resource Requirement Curve for the 2029/2030 Delivery Year by reference to three points. The quantity at each point is a percentage of a bracketed quantity, and the price at each point is established by a separate formula. The provision states:

For point (1), price equals: {the greater of [1.15 times Cost of New Entry minus 0.75 times the Net Energy and Ancillary Service Revenue Offset] or [0.2 times Cost of New Entry]} divided by (the applicable ELCC Class Rating of the Reference Resource) and Unforced Capacity equals: [the PJM Region Reliability Requirement minus Excluded RTO New Large Load Amounts] multiplied by 99%; For point (2), price equals: [0.5 times the price calculated for point 1] divided by (the applicable ELCC Class Rating of the Reference Resource) and Unforced Capacity equals: [the PJM Region Reliability Requirement minus Excluded RTO New Large Load Amounts] multiplied by 101.5%; and For point (3), price equals zero and Unforced Capacity equals: [the PJM Region Reliability Requirement minus Excluded RTO New Large Load Amounts] multiplied by 106.0%.

Proposed Tariff, Attachment DD § 5.10(a), Attachment A to PJM transmittal, Docket No. ER26-3515-000 (Aug. 13, 2026).

A2. The subtraction moves the Curve to the left by the Excluded Amount. Because the subtraction occurs inside the bracket and the percentages are applied afterward, it also contracts the horizontal distance between the points in the same proportion without changing the price at any point. The Curve therefore becomes steeper by a factor of $1 / (1 - E / RR)$.

A3. Point 1 of the Curve stands at 99 percent of the Reliability Requirement, and the Curve is horizontal from the y-axis to that point. The auction therefore clears at the Point 1 price whenever committed capacity is more than one percent below the requirement, and begins to clear on a sloped segment as soon as it comes within one percent of it. *[Derived from the quoted provision.]*

A4. The 2028/2029 auction cleared at the cap because committed capacity of 138,317.8 UCAP MW fell 6,831.3 MW below the FRR-adjusted Reliability Requirement of 145,149.1 MW - a shortfall of 4.71 percent and 5,380 MW to the left of Point 1. *[Derived.]* Supply met the Curve well inside its horizontal segment, where the temporary cap set the price.

A5. If the reliability shortfall persists, the Excluded Amount does not affect price until the reduction moves Point 1 back to the supply quantity. That exclusion level is the threshold. The threshold depends on the size of the shortfall: a market four percent short has a large threshold, while a market within one percent of its requirement has none because supply already meets a sloped segment before the exclusion applies.

A6. The 2028/2029 shortfall will not necessarily persist. Before the exclusion first operates, the Reliability Backstop Procurement and the Incremental Auction restatement both change the relationship between supply and the requirement.

A7. PJM sets the Initial Reliability Backstop Procurement Target at the observed UCAP shortfall in the 2028/2029 Base Residual Auction — 6,831.3 MW, the same quantity — and reduces it by Qualifying RBP Offset UCAP MW and Opt-Out UCAP MW to give the Final RBP Target. Proposed Tariff, Attachment DD § 18.1. Ms. Croop illustrates the calculation at a Final Target of 6,075.7 UCAP MW. Affidavit of Danielle Croop ¶ 48, Docket No. ER26-3380-000 (July 31, 2026). The figure is illustrative and the Final Target has not been set; the procurement window opens September 30, 2026. *Id.* ¶ 4.

A8. Committed backstop capacity must offer its available capacity, up to its committed RBP UCAP MW, as a price taker at \$0/MW-day. Proposed Tariff, Attachment DD § 18.6(a). The obligation attaches to the commitment and not to the arrival of any load. The commitment period runs for up to fifteen years; Ms. Croop states that the term varies with each resource’s commercial operation date, so that resources entering service after 2028/2029 carry shorter commitments. Croop Aff. ¶ 5.

A9. The 2028/2029 Reliability Requirement is not final. PJM restates it at each Incremental Auction. For the 2026/2027 Delivery Year, between the Base Residual Auction and the Third Incremental Auction:

2026/2027 parameter	Base Residual Auction	Third Incremental Auction	Change
Preliminary Forecast Peak Load	159,329.1	156,760.6	–2,568.5
Total Peak Load of FRR Entities	12,633.9	11,668.7	–965.2
Installed Reserve Margin	19.1%	18.6%	–0.5 pt
Pool-Wide Accredited UCAP Factor	77.0%	78.3%	+1.3 pt
Forecast Pool Requirement	0.9170	0.9291	+1.32%
Reliability Requirement	146,104.8	145,646.3	–458.5
Preliminary FRR Obligation	11,585.3	10,841.4	–743.9
Reliability Requirement adjusted for FRR	134,519.5	134,804.9	+285.4

PJM, 2026/2027 RPM Base Residual Auction Planning Parameters (Apr. 28, 2025) and 2026/2027 RPM Third Incremental Auction Planning Parameters (Mar. 11, 2026). The latter states the change in Reliability Requirement for the RTO as 285.4 MW.

A10. The FRR-adjusted Reliability Requirement is the product of two quantities: peak load net of the peak load of FRR entities, and the Forecast Pool Requirement. For 2026/2027 the first fell 1.09 percent between the two auctions — less than the 1.61 percent reduction in total peak load, because the peak load of FRR entities fell 7.64 percent and left the

numerator as well. The second rose 1.32 percent, the pool-wide Accredited UCAP Factor having risen 1.69 percent against a reserve margin 0.42 percent lower. Their product rose 0.21 percent. *[Derived.]*

The Reliability Requirement fell 458.5 MW while the quantity procured through RPM rose 285.4 MW because the FRR obligation fell by more than the requirement. Peak-load changes alone therefore do not determine the direction of the restatement.

A11. The analysis therefore does not forecast the restatement. The PJM Region holds capacity in excess of its requirement only if the restatement reduces that requirement by more than the shortfall remaining after the backstop delivers.

Backstop delivered at	Committed capacity	Short of the requirement
None	138,317.8	6,831.3
Half the illustrative Final Target	141,355.7	3,793.4
The illustrative Final Target in full	144,393.5	755.6

Derived. UCAP MW, measured against the 2028/2029 FRR-adjusted Reliability Requirement of 145,149.1.

A12. The price effect depends on how much of the shortfall the procurement closes.

- (a) The procurement closes most of the shortfall, leaving a small residual short. This case most nearly isolates the effect of the Excluded Amount, because supply sits close to the requirement and further movement of the clearing point is attributable to the reduction in the Curve.
- (b) The procurement leaves the Region long. The excess is zero-priced capacity in the stack with no corresponding demand. New Large Load must then absorb that length before the Curve can return to a sloped segment at a positive price, and the Excluded Amount removes that load from the Curve as it arrives.
- (c) The procurement leaves the Region materially short. The horizontal segment continues to govern and the exclusion is inert until the threshold at paragraph A5 is reached.

A13. Dr. Shanker addresses this configuration in the backstop proceeding. He describes a requirement that available backstop capacity offer at \$0/MW-day in the applicable RPM auctions, and observes that capacity arriving before, or in excess of, the associated load creates an unmatched zero-offer block that shifts the supply curve rightward and suppresses price. Limited Protest of Constellation Energy Generation, LLC, Docket No. ER26-3380-000, Affidavit of Roy J. Shanker ¶¶ 18–23 (Aug. 21, 2026). He presents it as a potential outcome.

Load forecasts are routinely revised between the Base Residual Auction and the Third Incremental Auction. A procurement sized to an earlier shortfall is ultimately measured against the Third Incremental Auction requirement. Whether a load revision changes the RPM procurement quantity also depends on the Forecast Pool Requirement and the FRR obligation; in 2026/2027, it did not. Paragraph A12 identifies the three configurations that may arise as Interim Resource Adequacy Service is implemented; each is examined below.

A14. The sequence does not permit that question to be resolved before the auction in which the exclusion first operates. The 2029/2030 Base Residual Auction is conducted in December 2026. The Second and Third Incremental Auctions for the 2028/2029 Delivery Year follow in July 2027 and February 2028. Proposed Tariff, Attachment DD sections 5.14(a)-(b). The Curve for 2029/2030 is therefore constructed, and the Excluded Amount applied to it, before the 2028/2029 position is settled. The scenarios below accordingly treat the backstop quantity and the residual shortfall as ranges rather than as known quantities. Appendix B addresses the operation of Attachment DD-4, section IV(b), and paragraph A46 addresses the separate question of when the exclusion lapses.

A.2 Starting conditions and the backstop threshold

A15. The 2028/2029 auction establishes the conditions against which the reduction will operate:

Parameter	Value
PJM Region Reliability Requirement	156,012.9
Total Peak Load of FRR Entities	11,556.0
Preliminary FRR Obligation	10,863.8
Reliability Requirement adjusted for FRR	145,149.1
Cleared, RPM	138,317.8 UCAP at \$325.00
Shortfall, RPM and FRR combined	6,831.3

PJM, 2028/2029 RPM Base Residual Auction Planning Period Parameters (posted July 27, 2026); PJM, 2028/2029 Base Residual Auction Report 3–5 (July 14, 2026), available at <https://perma.cc/X6UH-4ER4>.

A16. The Curve is constructed on the FRR-adjusted figure. The posted Curve points confirm this: Point (b) at 147,326.3 MW is 1.01500 times 145,149.1, and Point (d) at 153,858.0 MW is 1.06000 times 145,149.1. *[Derived: the ratios.]*

A17. Supply is inelastic in the region where the auction clears. PJM ran the same auction twice, once with the price collar in effect and once as a simulation without it:

Case	Clearing price	Cleared UCAP
Actual, collar applied	\$325.00	138,317.8
Simulation, no cap or floor	\$554.72	138,394.6

Case	Clearing price	Cleared UCAP
Difference	\$229.72	76.8 MW

2028/2029 Base Residual Auction Report, Table 2 and Appendix Table 1.

A18. Removing the collar raised the clearing price by \$229.72, an increase of seventy-one percent, and would have cleared 76.8 MW more from the same submitted offer curve.

The uncapped simulation holds submitted offers fixed. PJM states that it “does not know how offers may have changed” without the temporary cap and floor. *Id.* at 17 n.4. The simulation also does not establish that every capable resource participated: 6,202.9 MW of installed capacity was excused or unoffered, and 278.7 MW subject to a must-offer requirement did not offer. *Id.* at 8, 10 (Table 4).

Of 139,594.6 MW offered, 1,276.8 MW did not clear at the \$325.00 cap. *Id.* at 11 (Table 5). The uncapped simulation cleared 138,394.6 MW, so 1,200.0 MW remained uncleared at \$554.72. *[Derived by subtraction from the two posted quantities; id. at 17.]*

A19. The RTO failed the Three Pivotal Supplier test, and market power mitigation was applied to all Existing Generation Capacity Resources, substituting the lesser of the seller’s approved Market Seller Offer Cap or its submitted offer price. *Id.* at 3. Mitigation therefore establishes a cost-based ceiling on offers.

A20. The 2029/2030 Delivery Year requires separate treatment. The price collar applies only in that year, and backstop resources are least likely to be in service because the procurement window does not open until September 30, 2026. Croop Aff. paragraphs 4-5. Backstop generation not subject to a Notice of Intent to Offer in the Base Residual Auction must instead offer into the Incremental Auctions. Proposed Tariff, Attachment DD section 18.6(a). Incremental Auction entry does not set the earlier Base Residual Auction clearing price.

The procurement opens September 30, 2026, and the Base Residual Auction occurs in December 2026. Awards will therefore follow the deadline for a Notice of Intent to Offer into that auction. The base case includes no backstop capacity in the 2029/2030 Base Residual Auction and reports participation as a sensitivity:

Backstop capacity in the 2029/2030 Base Residual Auction	Zero-price block	Clearing price
None — base case	95,000	\$337.83
Half the illustrative Final Target	98,038	\$337.83
The illustrative Final Target in full	101,076	\$244.64

Derived, scenario. UCAP MW. The collar holds the price in the first two cases. Absent the collar the same three cases give \$554.72, \$554.72 and \$244.64. From 2030/2031, the

scenario assumes that the resources are in service, subject to a Notice of Intent to Offer, and fully participating.

A21. The 2028/2029 auction fell 6,831.3 MW short of its Reliability Requirement. The collar nevertheless ceases to bind at 3,124 MW of backstop capacity. The two quantities are measured against different things.

Step	UCAP MW
2029/2030 Reliability Requirement, gross of the Excluded Amount	147,329.8
Supply — 2028/2029 cleared plus one year of additions	140,395.8
Short of the Reliability Requirement	6,934.0 — 4.71%
Point 1 stands at 99 percent of the requirement	-1,473.3
Supply short of Point 1, before the Excluded Amount	5,460.7
The Excluded Amount moves Point 1 left by $0.99 \times 5,223.1$	-5,170.9
Supply short of Point 1, after the Excluded Amount	289.8

Derived. Zero Bring Your Own New Capacity assumed throughout, per paragraph A25.

A22. The Excluded Amount closes 5,171 MW of the 5,461 MW between supply and Point 1. [Derived.] A market 4.71 percent below its Reliability Requirement moves within 290 MW of Point 1 without any backstop capacity because Point 1 is 99 percent of a requirement from which the Excluded Amount has already been subtracted.

A.3 The Excluded Amount proxy

A23. 2029/2030. The endorsed parameters are a peak load forecast of 171,530 MW and a Forecast Pool Requirement of 0.9232, giving a Reliability Requirement, before adjustment for FRR, of 158,356 MW. The scenarios below are built on the FRR-adjusted quantity of 147,329.8 MW. *PJM, IRM, FPR and ELCC for the 2029/2030 BRA*, Markets and Reliability Committee (Aug. 19, 2026), slides 8–10, available at <https://perma.cc/2GK5-GHQC>.

A24. No published figure states the Excluded RTO New Large Load Amount for 2029/2030. The analysis uses the increment in Table B-9b of the 2026 PJM Load Forecast as a proxy. Table B-9b reports RTO summer-peak adjustments of 21,280 MW in 2028 and 27,361 MW in 2029, an increment of 6,081 MW.

The proxy is an upper bound, not the tariff quantity. Table B-9b combines large and unanticipated load changes, market adjustments, and peak-shaving adjustments. The filed definition is narrower: tariff-defined New Large Load above the 2028/2029 baseline, outside FRR Service Areas, and net of load supported by BYONC or assigned Allocated RBP UCAP MW. Table B-9b is also subject to revision; the 2028 figure moved 2,128 MW between the 2025 and 2026 Load Forecast Reports.

PJM Manual 19, Attachment B at 28 states that a submission included in the forecast period for an RPM Auction “must be considered Firm.” PJM Manual 19, *Load Forecasting and Analysis*, Rev. 39, available at <https://perma.cc/NEB7-L5ET>. The definition includes a long-term supply commitment coupled with a financial commitment, an Electric Service Obligation, or a Construction Commitment. It is broader than the definition used in the Load Analysis Subcommittee materials. PJM 2026 Long-Term Load Forecast, LAS (Jan. 23, 2026), available at <https://perma.cc/DR7H-W8E6>. The analysis treats the 2029 increment as firm on that basis.

A25. I assume three inputs.

First, that no New Large Load in the 2029/2030 Delivery Year has Bring Your Own New Capacity. The facts supporting that assumption are these. This filing was submitted on August 13, 2026 and has not been accepted. The Large Load Registry it would establish does not exist. The Base Residual Auction for the 2029/2030 Delivery Year is scheduled for December 2026, and PJM targets opening the Reliability Backstop Procurement window on September 30, 2026. The second subtraction in the Excluded Amounts definition reaches only New Large Load added on or after the 2029/2030 Delivery Year that is in an arrangement with Bring Your Own New Capacity or has been assigned Allocated RBP UCAP MW. Attachment DD-4 section VII(c) sets the deadline. For the 2029/2030 Delivery Year the requirements of section VII(a) must be reported to PJM no later than fifty days before the Base Residual Auction commences — late October 2026 for a December 2026 auction. The capacity then offers into that auction, and PJM updates the Large Load Registry to reflect verified arrangements “after the relevant RPM Auction.” Section VII(i) fixes the Accredited UCAP of the capacity at its value for the auction in which it cleared for the initial Delivery Year of the arrangement. The reporting deadline therefore falls before the rule establishing it can be accepted. Paragraphs A59 to A62 address later Delivery Years.

Second, that no New Large Load has Allocated RBP UCAP MW reducing its Excluded Amount. Attachment DD-4 section IX(a) allocates the Final RBP Target across Electric Distributor zones on each zone’s share of Reliability Backstop Procurement Charges, which are assessed on load growth from the 2026/2027 to the 2028/2029 Delivery Year. Section IX(b) then allocates within the zone as the Electric Distributor directs, or, absent direction by April 1, pro rata among all New Large Loads in the zone. Because New Large Load includes loads entering service after June 1, 2027 — both those within the 2028/2029 baseline and those after it — the default rule does not confine the allocation to the loads whose growth generated the charge. The quantity reaching post-baseline load is not determinable on this record, and paragraph A63 states the sensitivity.

Third, that the Forecast Pool Requirement is 0.9232 in every Delivery Year. That value was endorsed on August 19, 2026 for 2029/2030. No later Delivery Year has an endorsed value. The Forecast Pool Requirement is re-struck for each

Delivery Year and again at each Incremental Auction, and for 2026/2027 it moved from 0.9170 at the Base Residual Auction to 0.9291 at the Third Incremental Auction. Holding it fixed isolates the effect of the Excluded Amount from movements in the conversion between load and capacity.

A26. The proposal removes load from the Curve without recalculating the Forecast Pool Requirement, although that requirement depends on the load being removed. The Forecast Pool Requirement equals one plus the Installed Reserve Margin, multiplied by the pool-wide Accredited UCAP Factor; both inputs come from a reliability model driven by the peak-load forecast. The 2026/2027 restatement illustrates the sensitivity: a 1.61 percent reduction in peak load accompanied a decline in the Installed Reserve Margin from 19.1 to 18.6 percent and an increase in the pool-wide Accredited UCAP Factor from 77.0 to 78.3 percent, raising the Forecast Pool Requirement by 1.32 percent. The Excluded Amount nevertheless uses a Forecast Pool Requirement computed on all load, including the load the same provision removes. The filing does not demonstrate whether the reliability model would produce the same conversion factor on a load basis net of the Excluded Amounts, and it does not address that question.

A27. 2029/2030 remains collared. The price cap and floor apply for that Delivery Year and bear on the effect of any Interim Resource Adequacy Service exclusion, as paragraph A20 addresses. The collar expires thereafter; from 2030/2031 the Curve runs from Point 1 to zero price at Point 3, with no cap and no floor.

A28. Substantially all forecast load growth in the PJM Region is large load growth. Under the zero-offset proxy scenario stated at paragraph A25, substantially all of it is therefore removed from the Curve as it arrives.

Year	B-1 peak	Peak growth	B-9b large load	Large load growth	Share
2029	171,530	+5,963	27,361	+6,081	102%
2030	183,008	+11,478	38,805	+11,444	100%
2031	191,017	+8,009	46,638	+7,833	98%

PJM, *2026 Load Report Tables Workbook*, Tables B-1 and B-9b (Jan. 14, 2026), available at <https://perma.cc/U65B-Y5NX>. Table B-9b RTO summer-peak adjustments are 21,280 MW for 2028, 27,361 for 2029, 38,805 for 2030, 46,638 for 2031 and 53,949 for 2032.

A29. The Curve exclusion leaves the quantity against which PJM procures substantially unchanged.

Delivery Year	Peak load	Less FRR load	Less Excluded Amount, zero offsets	× FPR = RR net of the exclusion
2028/29	165,567	154,038	154,038	142,208
2029/30	171,530	159,586	153,928	142,107
2030/31	183,008	170,264	153,960	142,135

Delivery Year	Peak load	Less FRR load	Less Excluded Amount, zero offsets	× FPR = RR net of the exclusion
2031/32	191,017	177,716	154,124	142,287
2032/33	198,915	185,064	154,671	142,792

Derived. Assumptions: Forecast Pool Requirement held at the endorsed 0.9232 in every Delivery Year, per paragraph A25; that value is endorsed for 2029/2030 only. FRR share of peak held at its 2028/2029 value of 6.9634 percent. Excluded Amount taken as large load above the 2028/2029 baseline of 21,280 MW, net of the FRR share, with no reduction for Bring Your Own New Capacity or Allocated RBP UCAP MW. Paragraphs A59 to A64 address the cases in which such reductions apply.

A30. Across 2028/2029 through 2032/2033 the Reliability Requirement net of the Excluded Amount moves 584 UCAP MW while peak load net of load in an FRR Service Area rises 31,026 MW. Gross of the FRR adjustment the load figure is 33,348 MW; the net figure is the comparable basis, because the Reliability Requirement is itself FRR-adjusted. *[Derived.]* Under the stated scenario, load has substantially stopped driving the procurement quantity while supply continues to arrive.

A.4 Supply and offer-curve construction

A31. PJM's assumed resource portfolio has grown as follows. PJM describes that portfolio as a modeling input incorporating Notices of Intent to Offer, assumed deactivations and transitional capability, and cautions that modeled Accredited UCAP is not necessarily capacity available in the actual RPM market.

Delivery Year	ICAP	Change	Clearing price
2025/26	191,693	—	\$269.92
2026/27	193,738	+2,045	\$329.17
2027/28	198,379	+4,641	\$333.44
2028/29	196,871	−1,508	\$325.00
2029/30	203,004	+6,133	—

PJM IRM and FPR presentations to the Markets and Reliability Committee: 2026/2027 (Mar. 19, 2025), available at <https://perma.cc/VA7T-ZLKL>; 2027/2028 (Jul. 23, 2025), available at <https://perma.cc/F667-PR66>; 2028/2029 (Feb. 19, 2026), available at <https://perma.cc/8SK6-45FW>; 2029/2030 (Aug. 19, 2026), available at <https://perma.cc/2GK5-GHQC>. Clearing prices from: PJM, 2025/2026 BRA Report (Jul. 30, 2024), available at <https://perma.cc/KF9C-L8ES>, 2026/2027 BRA Report (Jul. 22, 2025), available at <https://perma.cc/UE43-ML7P>, 2027/2028 BRA Report (Dec. 17, 2025), available at <https://perma.cc/N2UZ-XSVD>, and 2028/2029 BRA Report (July 14, 2026), available at <https://perma.cc/X6UH-4ER4>.

A32. Announced deactivations, excluding units operating under a Reliability Must Run arrangement, are 835 / 1,270 / 3,238 / 0 / 217 MW across the 2026/2027 through 2030/2031 Delivery Years. PJM, Generator Deactivations (downloaded Aug. 23, 2026). The four intervals over which the portfolio is measured carry 835, 1,270, 3,238 and 0 MW; the 217 MW figure is 2030/2031 and falls outside that period. Adding the four quantities back to the net change of 11,311 MW gives gross additions of 16,654 MW over four years, or approximately 4,164 MW per year. [Derived.] Retirements absorbed roughly one-third of gross additions over four years. No announced deactivation quantity falls within the final measured interval.

A33. Between the 2027/2028 and 2029/2030 studies, the assumed portfolio rose 4,625 MW in installed-capacity terms and 2,568 MW in Accredited Unforced Capacity, an implied marginal factor of 0.5552. Applying the class-specific ELCC ratings to the additions produces a weighted average ELCC of roughly 50 percent. The scenarios use that conservative estimate for future installed-capacity additions.

A34. A clearing price is the intersection of supply and demand, not a function of available capacity alone. A vertical supply line at the quantity assumed available would treat every megawatt as offered at every price down to zero. The 2028/2029 auction shows otherwise: 1,276.8 MW of 139,594.6 MW offered did not clear at \$325.00, and offers span the prices below that level. 2028/2029 Base Residual Auction Report 11 (Table 5). When the Curve moves left, the clearing point moves down the offer curve; offers above the new price do not clear, so quantity and price fall together. A vertical-supply assumption misses that relationship and overstates both the quantity cleared and the price decline. The model therefore constructs an offer curve and solves the intersection.

A35. The offer curve is calibrated to PJM’s published 2028/2029 RTO supply curve. PJM posts a smoothed curve of sell offers submitted into the RTO and constrained LDAs. PJM, 2028/2029 BRA Supply Curves (July 17, 2026). Intermediate quantities are read from that graph and anchored to the two quantities PJM reports exactly.

Price, \$/MW-day UCAP	Quantity offered, UCAP MW
\$0	95,000
\$8	110,000
\$30	120,000
\$55	125,000
\$100	130,000
\$150	133,000
\$200	135,500
\$250	137,000
\$300	138,000
\$325.00	138,317.8
\$554.72	138,394.6

Price, \$/MW-day UCAP	Quantity offered, UCAP MW
Above \$554.72	139,594.6

Read and Derived. The shaded rows are posted quantities — the cleared quantity at the cap and the uncapped simulation — and fix the top of the curve. The intermediate quantities are my readings from the published graph and are approximations. Roughly 95,000 MW, some sixty-nine percent of the quantity cleared, was offered at or near zero. The curve is flat to that point, rises gently through the 120,000 MW range, and is near vertical above 137,000 MW: 76.8 MW separates \$325.00 from \$554.72, and a further 1,200 MW lies above \$554.72. Paragraph A44 tests the sensitivity of the results to the readings.

A36. For each later Delivery Year, the model shifts the offer curve right by the installed-capacity additions at paragraph A32, converted at the weighted ELCC rating from paragraph A33. It also extends the zero-price segment by the Reliability Backstop Procurement quantity, which must offer at \$0/MW-day. Adding 6,075.7 UCAP MW of backstop capacity moves the zero-price block from approximately 95,000 MW to approximately 101,000 MW. The clearing price is the intersection of the shifted offer curve and the Curve reduced by the Excluded Amount. The scenario uses the full Excluded Amount and assumes that no New Large Load holds Bring Your Own New Capacity, as paragraph A25 states.

A.5 Scenario results and sensitivities

The assumptions held constant across the two cases are stated at paragraph 37. Their derivation appears at A.3 for the Excluded Amount proxy, A.4 for supply and the offer curve, and A.2 for the backstop quantity and the collar.

A37. For 2029/2030 the following table applies the full-participation sensitivity described at A20. For later Delivery Years it applies the assumed full participation of the illustrative Final Target of 6,075.7 UCAP MW.

Delivery Year	Cleared quantity	Clearing price
2029/30	144,993	\$244.64
2030/31	145,912	\$206.02
2031/32	146,713	\$178.07
2032/33	147,727	\$156.79

Derived, scenario. This is a bounding case and its four assumptions run in the same direction: the Excluded Amount is at the full Table B-9b proxy; no New Large Load holds Bring Your Own New Capacity or Allocated RBP UCAP MW; the backstop delivers the illustrative Final Target in full and, from 2030/2031, offers wholly into the Base Residual Auction; and none of that capacity is already among the projected additions.

Paragraphs A20, A42, A44 through A45, A58 through A62 and A63 test these assumptions. Offer curve at paragraph A35 shifted by 2,078 UCAP MW per year of additions and by the backstop quantity at \$0/MW-day. Curve as reduced by the Excluded Amounts at paragraph A29. Point 1 price held at \$554.72 and Point 2 at half that figure per the posted 2028/2029 convention; the 2029/2030 collar applied. Forecast Pool Requirement held at 0.9232 and zero Bring Your Own New Capacity assumed, per paragraph A25.

A38. Under the full-participation sensitivity for 2029/2030 and the stated later-year assumptions, the effect of the Excluded Amount is the difference between two clearings of the same supply against Curves that differ only in the Excluded Amounts. Both clearings assume that no New Large Load holds Bring Your Own New Capacity or Allocated RBP UCAP MW, per paragraph A25.

Delivery Year	Without the Excluded Amount	With it	Effect
2029/30	\$337.83 — at the collar	\$244.64	-\$93.19
2030/31	\$554.72 — at Point 1	\$206.02	-\$348.70
2031/32	\$554.72 — at Point 1	\$178.07	-\$376.65
2032/33	\$554.72 — at Point 1	\$156.79	-\$397.93

Derived, scenario.

A39. In 2030/2031, the same physical supply clears at the Point 1 price without the exclusion and at \$206.02 with it. The two Curves have identical price coordinates and differ only by the Excluded Amount, and neither case assumes Bring Your Own New Capacity or Allocated RBP UCAP MW. Measured against the Reliability Requirement before the exclusion, the modeled market is 5.4 percent short without it and 7.2 percent short with it. *[Derived.]* The physical supply available is the same in both cases; what differs is the quantity procured and the price at which it clears.

A40. Under the modeled offer curve and the other assumptions stated above, maintaining a clearing price near \$325 would require net supply growth near the following quantities:

Delivery Year	Growth over the prior year	Installed capacity at 0.4991	Observed additions
2030/31	29 UCAP MW	58 MW	4,164 MW
2031/32	154 UCAP MW	308 MW	4,164 MW
2032/33	510 UCAP MW	1,023 MW	4,164 MW

Derived. The 2029/2030 figure is omitted: the 2028/2029 price of \$325.00 was set by the collar rather than by the Curve, and the two are not comparable.

A41. Paragraph A30's quantity result, in price terms. The Reliability Requirement net of the Excluded Amount moves 584 MW across four Delivery Years. Supply can move by that quantity without moving down the Curve; additions beyond it erode the price. Solving for the addition rate that holds the clearing price at the most recently posted Net Cost of New Entry of \$325.69/MW-day gives no solution once the illustrative backstop quantity offers at \$0/MW-day: with the Excluded Amount applied and no organic additions, the modeled 2030/2031 price is \$297.00. Excluding the backstop from the auction, the maxima are approximately 2,665 UCAP MW per year in 2030/2031, 1,828 in 2031/2032 and 1,509 in 2032/2033, equivalent at the 50 percent marginal accreditation rate to 5,330, 3,656 and 3,018 MW of installed capacity. *[Derived, scenario.]* The observed rate of 4,164 MW installed per year therefore exceeds the maximum from 2031/2032 forward.

A42. Excluded Amount. The Table B-9b increment is a proxy and an upper bound, reaching quantities the filed definition does not. Varying the Excluded Amount as a share of that proxy:

Delivery Year	0%	25%	50%	75%	100%
2029/30	\$337.83	\$337.83	\$317.08	\$274.19	\$244.64
2030/31	\$554.72	\$554.72	\$521.34	\$286.65	\$206.02
2031/32	\$554.72	\$554.72	\$554.72	\$280.10	\$178.07
2032/33	\$554.72	\$554.72	\$554.72	\$280.92	\$156.79

Derived, scenario. The lower columns sit at the Point 1 price because the exclusion is below the threshold at paragraph A22 and supply does not reach the sloped portion of the Curve. This sensitivity addresses the composition of the proxy and not its vintage. The operative quantity will be computed from the load forecast governing the 2029/2030 auction rather than the 2026 vintage used here, and successive vintages have risen: the 2028 figure alone moved 2,128 MW between the 2025 and 2026 Load Forecast Reports.

A43. The response is strongly nonlinear across the threshold. At half the proxy, the 2030/2031 price is \$521.34; at three-quarters, it is \$286.65. One-quarter of the proxy separates a clearing near the Point 1 price from one near half that price. This threshold behavior makes the Excluded Amount more consequential than the other modeled inputs.

A44. Offer curve. The intermediate readings at paragraph A35 are approximations from a smoothed graph. Scaling the curve between the zero-price anchor and the posted quantity at \$325, with the backstop quantity added to the zero-price block in every case:

Delivery Year	85,000 MW at \$0	95,000 MW at \$0	105,000 MW at \$0	115,000 MW at \$0
2029/30	\$250.41	\$244.64	\$237.24	\$227.22
2030/31	\$216.17	\$206.02	\$194.62	\$180.36

Delivery Year	85,000 MW at \$0	95,000 MW at \$0	105,000 MW at \$0	115,000 MW at \$0
2031/32	\$188.75	\$178.07	\$163.39	\$142.72
2032/33	\$170.36	\$156.79	\$139.46	\$114.69

Derived, scenario. A 30,000 MW range in the zero-price block moves the result by \$23 to \$56. The conclusion is not sensitive to reading error in the published curve, and a larger zero-price block produces a lower price, so the reading used is the conservative one within the range tested.

A45. Rate of supply additions.

Delivery Year	2,000 MW per year	4,164 MW per year	6,000 MW per year
2029/30	\$268.47	\$244.64	\$227.36
2030/31	\$246.72	\$206.02	\$179.28
2031/32	\$230.84	\$178.07	\$141.60
2032/33	\$221.78	\$156.79	\$111.89

Derived, scenario. 4,164 MW is the average observed across the four Delivery Years at paragraph A32.

On the full-proxy paths at paragraphs A44 and A45 the clearing price falls below the 2028/2029 Net Cost of New Entry of \$325.69 in every Delivery Year from 2030/2031. Halving the rate of new entry changes how far the price falls, not whether. Where the Excluded Amount is materially below the proxy, or where Allocated RBP UCAP MW reach post-baseline load in quantity, the price is higher and may remain at Point 1; paragraphs A42 and A63 state those cases. The scenario treats backstop entry as the result of the procurement obligation and the \$0/MW-day offer requirement rather than as a response to auction prices. I state these as scenarios and not as forecasts: the auctions have not been held, the Final RBP Target has not been set, and the 2029/2030 planning parameters, endorsed at the August 19, 2026 Markets and Reliability Committee meeting, have not been posted for the Base Residual Auction.

A46. The Excluded Amounts do not run indefinitely by their terms. The New Large Load definition provides that where “three consecutive Delivery Years meet the requirements of Tariff, Attachment DD-4, section IV(b)(iii),” the vintage date advances: New Large Load thereafter means load in service after June 1 of the first Delivery Year in which those requirements are not met. That provision may therefore limit how long future load additions enter the Excluded Amount. The tariff text does not state whether an advance releases load already registered and excluded, or applies only prospectively to load sited after the new date. I do not assume either interpretation in the price scenarios above.

A47. Section IV(b)(iii) is applied after the Third Incremental Auction, against a Reliability Requirement restated at that auction and against capacity commitments made in the Base Residual and Incremental Auctions together. It does not establish a Base Residual Auction clearing price at which the vintage date advances. Appendix B addresses the formula and illustrates why PJM should state its operation expressly.

A48. Across the four studies since 2025/2026, PJM's assumed resource portfolio rose 11,311 MW in installed-capacity terms. Accredited Unforced Capacity rose 6,514 MW over the three reported intervals, notwithstanding the retirement of Rockport 1 and 2, Cardinal 3, and Kincaid 1 and 2. PJM's assumptions show additions outpacing retirements on both measures.

A49. I do not assume that any particular resource reaches commercial operation. Berkeley Lab reports that 13 percent of capacity submitting interconnection requests between 2000 and 2020 had reached commercial operation by the end of 2025, while 75 percent had withdrawn. Rand et al., *Queued Up: 2026 Edition* (Lawrence Berkeley Nat'l Lab. 2026), available at <https://web.archive.org/web/20260603095350/https://emp.lbl.gov/queues>. The model assumes only that investment continues at approximately the rate reflected in PJM's planning studies.

A50. Resources committed to date reflect forward conditions that the proposal alters. A developer reaching financial close forecasts the Delivery Years in which a plant will first offer, including the load PJM publishes and expects to procure against. The proposal removes substantially all of that load growth from the procurement quantity after those commitments. Reliability Resource Initiative projects were bid in March 2025 and selected in May 2025, when the two most recent auctions had cleared at \$269.92 and \$329.17; once in service, those projects must offer into the Base Residual Auction for at least ten years.

A51. PJM has stated the relationship between price suppression and supply. Its 2028/2029 auction report states that a cap below the established Variable Resource Requirement Curve "can reduce the amount of investment, and therefore supply" in the PJM Region. 2028/2029 Base Residual Auction Report 3 (July 14, 2026), available at <https://perma.cc/X6UH-4ER4>. PJM elsewhere ties market effectiveness to

durability - investors' confidence that high prices will persist long enough to attract and retain the capital they are intended to signal

PJM identifies "actual regulatory interventions, backstop procurement mandates and price cap proposals that have emerged in the PJM region" among the risks investors consider. It adds that uncertainty from contemplated but unfinished intervention may itself dampen investment. PJM, *Powering Reliability Through Market Design* 25-26 (May 6, 2026).

A52. On the bounding case at paragraph A37 the scenario clearing price falls below the cost of new entry from 2030/2031 forward. Net Cost of New Entry for the RTO was \$325.69/MW-day in unforced capacity terms for the 2028/2029 auction. A single Delivery Year clearing below a prior year's Net CONE does not establish that new entry cannot be financed, Net CONE being a reference-resource benchmark whose later-year values have

not been posted for the Base Residual Auction. What the scenario shows is a sustained path below the most recent posted benchmark, in the Delivery Years the Reliability Resource Initiative and the Reliability Backstop Procurement were designed to reach.

A53. The filing does not quantify this price effect. The transmittal at 58 states that matched Bring Your Own New Capacity produces a “symmetrical, one-for-one addition” and “an effectively price-neutral outcome,” but provides no supporting scenario or sensitivity and does not address the interaction with Reliability Backstop Procurement discussed above.

A.6 Coverage, allocation and accreditation

A54. A declining accreditation factor might appear to offset the reduction by shrinking supply in unforced-capacity terms. Under a uniform construction, it would not. Supply would equal installed capacity multiplied by the pool-wide Accredited UCAP Factor; the Reliability Requirement would equal peak load multiplied by one plus the Installed Reserve Margin and by the same factor. The factor cancels.

A55. The scenario uses a different construction. It begins with the 2028/2029 offer curve, whose posted unforced-capacity quantities do not rescale, and converts additions at the marginal rate from paragraph A33 rather than the pool-wide factor. Supply so constructed is substantially independent of the pool-wide factor, while the Curve quantity remains proportional to it. The cancellation does not hold, and the analysis does not rely on it.

A56. Restoring the Point 1 price on the 2031/2032 inputs would require a Forecast Pool Requirement of approximately 0.9462 against the endorsed 0.9232 — either an Accredited UCAP Factor of 0.7859 at the endorsed reserve margin, or an Installed Reserve Margin of 23.4 percent at the endorsed accreditation factor. *[Derived.]* The pool-wide factor has run 0.7699, 0.7717, 0.7834 and 0.7668 across four consecutive studies. The Installed Reserve Margin has risen from 19.1 percent to 20.4 percent across the same four.

A57. Neither parameter offsets the reduction at values observed to date. The clearing price depends on more than the Excluded Amount and the supply that arrives: it depends also on the Curve’s price inputs, being Gross and Net Cost of New Entry, on the offers submitted, and on locational constraints.

A58. Paragraphs A37 to A57 assume that no New Large Load holds Bring Your Own New Capacity or Allocated RBP UCAP MW. The Excluded Amounts definition subtracts, along with the 2028/2029 baseline, the megawatt quantity of New Large Load added on or after the 2029/2030 Delivery Year that is in an arrangement with such capacity, converting the whole to unforced capacity terms by the Forecast Pool Requirement. Whether that subtraction reaches the whole load of a New Large Load holding an arrangement or only the covered portion is not stated; the cases below assume the covered portion.

A59. The two constructs enter the analysis differently and must be modeled separately. Bring Your Own New Capacity is capacity procured by the load and must participate as a price taker for ten consecutive Delivery Years beginning with the first Delivery Year of the arrangement. Proposed Tariff, Attachment DD-4 § VIII. Allocated RBP UCAP MW are

already in the supply stack. The backstop quantity enters the zero-price block at paragraph A36 whether or not it is allocated to any load; allocating it to a New Large Load restores that load to the Curve but does not create a second block of supply.

A60. The table varies the share of New Large Load holding Bring Your Own New Capacity and solves each case on the offer curve at paragraph A35. Covered load returns to the Curve. Whether the supporting capacity is additional to the projected additions at paragraph A32 or already included in them is a modeling assumption, not a filed mechanic; the table therefore states both cases.

Case 1 — the supporting capacity is additional to the projected additions.

Delivery Year	No coverage	25 percent covered	50 percent covered
2030/31	\$206.02	\$207.89	\$209.71
2031/32	\$178.07	\$180.36	\$182.60
2032/33	\$156.79	\$160.05	\$163.22

Case 2 — the supporting capacity is already included in the projected additions.

Delivery Year	No coverage	25 percent covered	50 percent covered
2030/31	\$206.02	\$286.65	\$521.34
2031/32	\$178.07	\$280.10	\$554.72
2032/33	\$156.79	\$280.92	\$554.72

Derived, scenario. 2029/2030 is omitted; paragraph A25 sets out the dates bearing on whether an arrangement can be formed for that Delivery Year. In the additive cases the supporting capacity is added to the zero-price block. In the embedded cases the same megawatts are repriced to zero within the projected additions and are not added again. The Allocated RBP UCAP MW quantity remains in the zero-price block in every case and is not varied here.

A61. When the supporting capacity is additional, Bring Your Own New Capacity coverage modestly reduces the modeled price effect. Covered load moves the governing Curve point right by the applicable quantity multiplier, 101.5 percent on the segment where these auctions clear, while supply moves right by the capacity quantity. The Curve therefore moves roughly 1.5 percent farther than supply. PJM's price-neutrality rationale substantially holds under that construction, and I do not contend that covered capacity suppresses price. When capacity is already included in projected additions, restoring load to the Curve without an offsetting supply addition produces a much larger effect.

A62. Available capacity limits coverage. Fifty percent coverage requires 7,526 UCAP MW of new capacity by 2030/2031 and 14,029 UCAP MW by 2032/2033, equivalent to 3.6 and 6.8 years of additions at the paragraph A32 rate of 4,164 MW of installed capacity per year, converted to unforced capacity at the marginal accreditation rate of approximately 50

percent stated at paragraph A33. [Derived.] The scarcity that produced the 2028/2029 shortfall limits the quantity of new capacity available, and therefore the share of New Large Load that can obtain coverage.

A63. Allocated RBP UCAP MW reduce the Excluded Amount without adding supply, the backstop quantity already being in the zero-price block. Varying the quantity allocated to post-baseline New Large Load:

Delivery Year	None allocated to post-baseline load	Half the Final Target	The Final Target in full
2030/31	\$206.02	\$267.53	\$416.15
2031/32	\$178.07	\$228.35	\$299.27
2032/33	\$156.79	\$199.46	\$258.47

Derived, scenario. The allocated quantity restores the corresponding load to the Curve; no capacity is added, the backstop quantity already having entered the zero-price block at paragraph A36.

A64. Apart from the quantity of load excluded, allocation of RBP UCAP MW produces the widest sensitivity in the analysis, and it runs in one direction. The zonal quantity is based on Table B-9b load growth from 2026/2027 through 2028/2029, totaling 9,033.2 MW. Croop Aff. paragraphs 43, 46. That load falls within the 2028/2029 baseline and is never excluded. Section IX(b) nevertheless allocates within a zone as the Electric Distributor directs or, absent direction, pro rata among all New Large Loads. Cost responsibility is fixed on one vintage, but the allocation rule does not confine the benefit to that vintage. PJM states that the benefit should follow cost responsibility. The present record does not determine the quantity reaching post-baseline load.

A65. A load that brings its own capacity contracts against a revenue stream the proposal reduces. Such capacity offers at \$0/MW-day for ten consecutive Delivery Years, clears, and receives the resource clearing price. Relative to Net Cost of New Entry of \$325.69, the paragraph A37 scenario leaves a gap of approximately \$43,700 per MW-year in 2030/2031. [Derived.] For 2029/2030 the base case clears at \$337.83 under the collar, so no gap arises in that case. In the full-participation sensitivity at paragraph A37 the modeled clearing price is \$244.64, which lies within the collar and is therefore the clearing price. The bilateral arrangement must account for that annual revenue gap, and for uncertainty in the price path, over its ten-year term. In exchange, the load receives relief from an obligation compensated under Attachment DD-4 section X at fifty percent of the Non-Performance Charge Rate, electable to zero, without a settlement backstop. The exclusion also alters the choice the load faces. A New Large Load weighs the cost of procuring capacity against the cost of remaining eligible for Interim Resource Adequacy Service: the Locational Reliability Charge it pays in any event, plus the expected cost of curtailment, compensated at not more than fifty percent of the Non-Performance Charge Rate and electable to zero. The exclusion lowers the clearing price, and so lowers the cost of the

capacity the load pays for through its Load Serving Entity, while the compensation for curtailment is set administratively. To that extent the mechanism reduces the incentive to procure Bring Your Own New Capacity, which is the outcome the filing seeks to encourage. These economics may affect the availability and pricing of Bring Your Own New Capacity arrangements, and the paragraph A25 assumption may extend beyond 2029/2030.

A.7 Locational Reliability Charge and the section X(a) rate

A66. The two quantities can be compared using the posted parameters for a single Delivery Year, though the Tariff does not link them. For 2027/2028 the Forecast Pool Requirement is 0.9260 and the clearing price is \$333.44/MW-day.

One megawatt of New Large Load, 2027/2028

Locational Reliability Charge	\$112,699 per MW-year
Section X(a) rate, RTO	\$1,139 per MWh
Hours of curtailment at which compensation equals the charge	99

[Derived.] The comparison is arithmetic only. The charge is an obligation allocated under Schedule 8 and the rate is compensation for curtailment; neither is calculated by reference to the other.

APPENDIX B — ADDITIONAL IMPLEMENTATION ISSUE: ATTACHMENT DD-4, SECTION IV(b)

B1. Attachment DD-4, section IV(b) governs the amount of Eligible New Large Load that must be available to provide Interim Resource Adequacy Service, determined after the Third Incremental Auction for each Delivery Year. It does not determine the amount removed from the auction procurement quantity. That reduction is made by the Excluded Amounts definitions and applied in Attachment DD, section 5.10(a).

B2. The provision does not express its calculation unambiguously. Two features leave the formula unclear.

B3. The placement of the divisor. In subsections (i) and (ii) the bracket encloses a comparison — capacity “is less than” the requirement — the division by the Pool-wide Accredited UCAP Factor follows the bracket, and a clause then measures the result against the Eligible New Large Load Amounts. In subsection (iii) the bracket encloses “equals or exceeds,” the division again follows a completed comparison, and nothing follows it. A comparison yields no quantity that can be divided. At least three readings are available: the divisor applies to the difference between the two quantities, to the requirement alone, or to nothing at all in subsection (iii).

B4. The units on each side, and the factor used. Section V(b) converts Bring Your Own New Capacity and Allocated RBP UCAP MW to load by dividing by the Forecast Pool Requirement, and both Excluded Amounts definitions convert load to capacity “by using the Forecast Pool Requirement.” Section IV(b) instead applies the Pool-wide Accredited UCAP Factor, and measures the result against the Eligible New Large Load Amounts, which section V(b) defines as registered peak load less an offset — a quantity denominated in load. The Commission has described the Forecast Pool Requirement as reflecting “PJM’s installed capacity requirement in Unforced Capacity (UCAP) terms,” and as applied to a Demand Resource’s Nominated Value to yield unforced capacity. *PJM Interconnection, L.L.C.*, 186 FERC ¶ 61,080 at PP 2, 9 (2024). The Forecast Pool Requirement converts load to capacity; the Pool-wide Accredited UCAP Factor converts installed capacity to unforced capacity.

B5. The Reliability Requirement is also unqualified. Section IV(b) refers to “the PJM Region Reliability Requirement determined prior to the Third Incremental Auction” without stating whether that quantity is gross or net of the Excluded Amounts, and without stating whether the comparison is made on a regional basis or net of the obligations of FRR Entities. Attachment DD, section 5.4(c)(2)(i) states a comparison of the same shape — the updated Reliability Requirement against total capacity committed — and there qualifies the requirement as “inclusive of any adjustments associated with Excluded RTO New Large Load Amounts or Excluded LDA New Large Load Amounts.”

B6. PJM should state the calculation and its units expressly on the tariff sheets: what quantity the Pool-wide Accredited UCAP Factor operates on; the units on each side of the comparison; why that factor rather than the Forecast Pool Requirement; whether the

Reliability Requirement is gross or net of the Excluded Amounts; and whether the comparison is regional or adjusted for FRR.

B7. A further item requires clarification and is addressed at paragraphs A46 and A47. The New Large Load definition advances its vintage date where three consecutive Delivery Years meet the requirements of section IV(b)(iii). The definition redefines New Large Load prospectively. Whether load already registered and excluded ceases to be excluded on the new date, or whether the advance applies only to load sited afterward, is not stated. On the first reading the accumulated Excluded Amount unwinds; on the second it stops growing.

Illustration — why the ambiguity is worth resolving

B8. On the 2029/2030 endorsed parameters, the FRR-adjusted Reliability Requirement gross of the exclusion is 147,329.8 UCAP MW, the Excluded Amount on the Table B-9b proxy is 5,223.1 UCAP MW, the requirement net of the exclusion is 142,106.7 UCAP MW, and Point 1 of the reduced Curve is 140,685.6 UCAP MW. *[Derived.]*

B9. The calculation below assumes committed capacity equal to Point 1 of the reduced Curve, and applies the divisor to the difference between the requirement and committed capacity. The two rows differ only in whether the Reliability Requirement is read gross or net of the Excluded Amounts.

Reading	Calculation	Result	Consequence
Requirement gross of the exclusion	$(147,329.8 - 140,685.6) \div 0.7668$	8,664.8 MW	exceeds the 5,657.6 MW of Eligible New Large Load Amounts available, so section IV(b)(i) applies and all must be available
Requirement net of the exclusion	$(142,106.7 - 140,685.6) \div 0.7668$	1,853.3 MW	section IV(b)(ii) applies and roughly one-third must be available

[Derived.] The difference between the two results, 6,811.6 MW, is the Excluded Amount divided by the same factor. The same auction outcome therefore yields materially different availability determinations depending on which reading governs.

B10. The two readings therefore produce materially different annual availability determinations from the same auction outcome. Neither determination causes curtailment; a real-time Interim Resource Adequacy Service Action remains subject to the separate operational trigger, and Mr. Pilon confirms that the framework “does not require PJM to reduce affected load whenever an IRAS requirement exists.” Pilon Aff. ¶ 22.

**AFFIDAVIT OF CARL COSCIA
ON BEHALF OF PJM POWER PROVIDERS GROUP**

I, Carl F. Coscia, hereby declare under penalty of perjury pursuant to 28 U.S.C. § 1746 that the statements contained in the foregoing affidavit on behalf of PJM Power Providers Group are true and correct to the best of my knowledge, information, and belief.

Executed this 3rd day of September, 2026.



Carl F. Coscia

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document on each person designated on the official service list compiled by the Secretary in the above-captioned proceeding.

Dated at Washington, D.C., this 3rd day of September, 2026.

Hazel Lavarn-Walker

Hazel Lavarn-Walker