UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Reactive Power Capability Compensation	**)**	**Docket No. RM22-2-000**
	)	

COMMENTS OF PJM INTERCONNECTION, L.L.C.

Pursuant to the Federal Energy Regulatory Commission's ("FERC" or the "Commission") March 21, 2024 Notice of Proposed Rulemaking ("NOPR"),[1] PJM Interconnection, L.L.C. ("PJM") hereby submits the following comments.

I. COMMENTS

A. PJM Supports the Commission's Proposed Reforms, and Encourages the Commission to Adopt Them as Proposed in the NOPR.

In its February 22, 2022 Notice of Inquiry ("NOI") Comments,[2] PJM explained how it had begun work to reform reactive power compensation in PJM through a new stakeholder group, called the Reactive Power Compensation Task Force ("RPCTF"), and stated that "[o]ut of deference to that process, PJM will not prescribe in these comments a specific solution or particular reform to reactive power capability compensation in the PJM Region."[3] After nearly two years, PJM stakeholders were unable to reach consensus on any of the four proposed reform packages, and subsequently voted to cease all work on the issue and sunset the RPCTF.[4]

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[1] *Reactive Power Capability Compensation*, 186 FERC ¶ 61,203 (2024) (hereafter, the "NOPR"). *See also* 89 Fed. Reg. 21,454 (Mar. 28, 2024) ("Comments are due May 28, 2024. Reply comments are due June 26, 2024.").

[2] *Reactive Power Capability Compensation*, Comments of PJM Interconnection, L.L.C., Docket No. RM22-2-000 (Feb. 22, 2022) ("PJM NOI Comments").

[3] *Id*. at 1.

[4] *See* Minutes of the August 9, 2023 Market Implementation Committee at 2, available here: https://www.pjm.com/-/media/committees-groups/committees/mic/2023/20230906/20230906-draft-minutes---mic---892023.ashx.

While PJM did not prescribe a specific reform in its NOI Comments, PJM described at length the specific problems with the current reactive power compensation paradigm that it had observed over the last two decades of administration. These problems include:

1. The significant investment of time and resources by many parties to determine the rate, including the filing generator, zonal transmission customers, transmission owners, FERC advisory staff, FERC trial staff, and the Independent Market Monitor for PJM ("IMM");

2. The "black box" settlements that result from this significant investment of time and resources, which in the specific context of an important ancillary service seems at odds with the Commission's general precedent on efficient energy and ancillary service price formation;

3. The regulatory uncertainty that the current regime creates for all parties regarding what the eventual just and reasonable rate for a specific unit will ultimately be, and potential refund obligations;

4. The resource-intensive burden imposed on PJM's Legal and Settlements Departments in administering the current paradigm;

5. The resource-intensive burden imposed on PJM's reactive power testing program and staff in administering the current paradigm;

6. The unnecessary financial and credit risk to customers created by the contingent refund liability associated with the individual cost-of-service rate cases, including from non-Members;[5] and

7. The absence of any rate consequence for a unit's failure to provide the reactive power capability for which it is being compensated.[6]

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[5] *Id*. at 7-8 ("First, companies have proposed reactive power capability revenue requirements, and the Commission has accepted those revenue requirements, irrespective of whether or not those entities are PJM Members. Because these non-Member entities, by definition, have not executed the PJM Operating Agreement, PJM's ability to pursue remedies for credit risk and/or default scenarios directly against them is significantly reduced for no justifiable reason. Additionally, in order to participate in PJM's markets and settle accounts, entities that are not PJM Members are required to enter into a Delegation of Authority ("DOA") with a Member who is a qualified Market Participant. In this instance, reactive power payments are sent to the Principal of the DOA (the Market Participant), and passed to the non-PJM Member. The DOA creates a contingent liability for the Principal pursuant to the DOA. Because the Principal may be unaware of the reactive refund liability, this may create an unknown financial burden for the Principal.").

[6] *Id*. at 2-8.

In recent years, PJM has also expressed concern regarding generators that are not interconnected with the Bulk Electric System ("BES") receiving compensation from zonal transmission customers for reactive power capability that cannot be relied upon by PJM to control BES voltage.[7]

The Commission's proposal in the NOPR would largely eliminate these identified problems, and given that PJM stakeholders have been unable to reach consensus on a new rate paradigm after two years of work, PJM supports the proposed reforms identified in the NOPR, and encourages the Commission to adopt them as proposed. However, as noted below, given the Commission's broad proposed findings that there is no clearly identified incremental cost for providing reactive power,[8] the Commission needs to speak clearly as it addresses transition issues, whether it is finding that the collection of reactive revenues beyond the date of publication of the Final Rule in the *Federal Register* is *per se* unjust and unreasonable, or whether it is finding,

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[7] *See, e.g.*, *Cottontail Solar 4, LLC*, Motion for Leave to Answer and Answer of PJM Interconnection, L.L.C., Docket EL24-77-000 *et al.*, at 15-16 (May 13, 2024) (requesting the Commission reject future filings seeking reactive compensation that fail to demonstrate their direct interconnection with the Bulk Electric System); *Flemington Solar, LLC*, Revised Testimony of Daniel J. Moscovitz on Behalf of PJM Interconnection, L.L.C., Docket Nos. EL23-32 *et al.*, at PP 5-6 (Feb. 28, 2024) (explaining that PJM is not able to rely on facilities not directly interconnected with the Bulk Electric System to maintain voltages on the Bulk Electric System); *see e.g., Cottontail Solar 4, LLC*, 186 FERC ¶ 61,187, at P 11 (2024) (establishing hearing and settlement procedures out of a concern that if the facilities were not directly connected to the Bulk Electric System, PJM may reasonably conclude that the facilities do not have the ability to maintain transmission voltages within acceptable limits); *Cottontail Solar 1, LLC, et al.*, 186 FERC ¶ 61,101, at P 14 (2024) (same); *Lyons Solar, LLC*, 186 FERC ¶ 61,049, at P 15 (2024) (same); *Nestlewood Solar 1 LLC*, 186 FERC ¶ 61,050, at P 11 (2024) (same); *Roundtop Energy, LLC*, 185 FERC ¶ 61,211, at P 12 (2023) (noting concerns that "the Oxbow facility may be distribution-connected, and, therefore, may not be operationally capable of providing voltage support to PJM's transmission facilities such that PJM can rely on those facilities to maintain transmission voltages, as required by Schedule 2 of the PJM Tariff") (citations omitted); *Whitetail Solar 3, LLC*, 184 FERC ¶ 61,145, at P 42 (2023) (concluding that in order to receive compensation for Reactive Services under Schedule 2 a facility must be "operationally capable of providing voltage support to PJM's transmission facilities in a way that *allows PJM to rely* on that generation facility to maintain transmission voltages. . .") (emphasis added); *see also Gaucho Solar LLC*, 185 FERC ¶ 61,014, at P 30 (2023) ("[B]ecause the resources at issue were not directly connected to the transmission system (or BES), PJM concluded the facilities would not have the ability to maintain transmission voltages within acceptable limits (i.e., provide voltage support)."); *id.* at P 31 ("The evidence in the record indicates that the Gaucho Solar Facility is not directly connected to the transmission system (or BES).").

[8] *See, e.g.*, NOPR at P 6 ("The Commission has also recognized that there is little to no incremental capital expenditure associated with the equipment necessary for the production of reactive power within the standard power factor range"); NOPR at P 42 ("To the extent that there are incremental costs to provide reactive power within a generating facility's standard power factor range, we see no reason why such costs should not be reflected through energy or capacity offers made in organized and bilateral markets.").

pursuant to its broad remedial authority under FPA Section 206, that continued collection during a transition period (under terms to be submitted by each affected RTO/ISO given its market design and timing) is an inherent part of a substitute rate in this docket. An additional path that the Commission alludes to in the NOPR (*i.e.*, that units could identify specific uncompensated costs outside of the capacity market on a 'one-off' basis), would simply perpetuate the litigation burdens inherent in the present approach. Absent clarity on *how* the Commission is using its Section 206 authority and *what* it is finding to be unjust and unreasonable going forward, this docket could engender more litigation over a product which already suffers from excessive litigation.

B. The Commission Should Afford Transmission Providers Like PJM Flexibility in Implementation.

In the NOPR, the Commission proposed to require each transmission provider to submit a compliance filing within 60 days of the effective date of the final rule revising its OATT, *pro forma* LGIA, and *pro forma* SGIA, and to allow 90 days from the date of the compliance filing for implementation of the proposed reforms to become effective.[9] The Commission further explained that "[w]e seek comment on whether the proposed compliance and implementation timeline would allow sufficient time for changes to be implemented in response to a final rule or whether a limited transition period (beyond the 90-day implementation period proposed in this NOPR) may be necessary."[10]

Among its questions, the Commission asked two in particular that PJM will address in these comments:

> *For regions that have an established capacity market, should transmission providers be allowed to make the implementation date of their compliance filing align with the region's capacity market timelines in order to allow costs associated with reactive power*

[9] NOPR at 54.

[10] *Id*. at 56.

> *production, if any, to be incorporated into capacity market bids? Would a different transition mechanism, if any, be necessary for regions without a capacity market? Would it be unduly discriminatory or preferential to set different implementation dates for the final rule in different markets and regions?*
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> *If the Commission allows existing generation resources that have previously received compensation for reactive power supply to continue to receive compensation for a limited period while prohibiting new generation resources from receiving reactive power compensation, how should it determine eligibility for continued compensation in a manner that is just and reasonable and not unduly discriminatory or preferential?*

Regarding the Commission's first question, PJM respectfully requests that, rather than the NOPR's proposed uniform implementation effective date of 90 days from the date of compliance filing submission, transmission providers in regions with centralized capacity markets such as PJM be permitted flexibility to propose effective dates on compliance that will align with applicable capacity market and billing and settlements timelines. This would allow costs associated with reactive power production to be incorporated into capacity market bids, and also ensure alignment with applicable billing and settlements dates. While PJM would seek input from stakeholders on any such "transition" period prior to submitting its compliance filing, one conceivable manifestation of this flexibility would be to permit generators who are currently receiving reactive power revenues under Tariff, Schedule 2 to continue to do so until the Delivery Year of the first Base Residual Auction ("BRA") where the removal of these reactive revenues from the Energy and Ancillary Services ("E&AS") offset can be reflected in the auction parameters. This concept would be based on the idea that these generators submitted their bids in prior auctions *without* the knowledge that Tariff, Schedule 2 revenues would no longer exist, which may have impacted the bids they ultimately submitted.

Regarding the Commission's second question, allowing generators with existing reactive power revenues under Tariff, Schedule 2 to continue to receive those revenues until the auction parameters of the BRA can reflect the absence of those revenues raises a key consideration—what to do about generators who do *not* have existing revenues in the interim? Here again, PJM requests flexibility in how it may implement a solution to address this issue. While PJM would seek feedback on compliance approaches from its stakeholders, the easiest solution from an implementation perspective would be to disallow any units not currently receiving reactive revenues from receiving any such revenues in the interim, as these units by definition did not rely on an expectation of reactive power revenues when submitting capacity market bids.

Another conceivable path for units without existing revenues could be distinct reactive compensation until the reactive offsets can be removed from the capacity market (that is, until the start of the first Delivery Year for which the BRA has not yet been executed). This may be prudent since the net E&AS offset calculated for the reference resource which sets the Variable Resource Requirement curve for those Delivery Years presumed the resource would earn reactive power revenues in those years. For this path a few potential options could be explored. One option could be to allow compensation based on a flat rate design in the interim. This flat rate could be based on an average of existing compensation per MVAR of capability for the PJM fleet at the time of the Final Rule in this proceeding, or alternatively could be based on the flat rate value used in the existing assumptions for the reactive revenues in the E&AS offset for the reference resource used in the PJM capacity market.

Under any of these approaches, the Commission would need to be clear as to whether it is finding that the collection of reactive revenues beyond the date of publication of the Final Rule in the *Federal Register* is unjust and unreasonable or whether it is finding, pursuant to its broad

remedial authority under FPA Section 206, that continued collection during a transition period (under terms to be submitted by each affected RTO/ISO given its market design and timing) is an inherent part of a substitute rate in this docket. Absent clarity on *how* the Commission is using its Section 206 authority and *what* it is finding to be unjust and unreasonable going forward, this docket could engender more litigation over a product which already suffers from excessive litigation.

Finally, in the NOPR, the Commission explained that "[i]n evaluating compliance filings made by RTOs/ISOs, the Commission will apply the "consistent with or superior to" standard to deviations from the adopted *pro forma* Schedule 2 and the "independent entity variation standard" to deviations from the *pro forma* LGIA and *pro forma* SGIA."[11] To this end, PJM respectfully requests that as part of their compliance filings implementing the new rate paradigm, RTOs/ISOs be permitted to propose rules around testing, monitoring, and penalties, to ensure that generators actually provide the reactive power capability that they are required to provide under their Commission-jurisdictional interconnection agreements when called upon, as correctly identified in the NOPR. As described in the PJM NOI Comments, ensuring generator performance in this space is an important issue for PJM, and one that would be an integral part of ensuring that the required reactive capability is actually provided.

[11] NOPR at P 55.

II. CONCLUSION

In accordance with the foregoing, PJM respectfully requests that the Commission accept the comments submitted herein into the record in this proceeding.

Respectfully submitted,

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On behalf of
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