

Mark Takahashi Chair, Board of Managers

PJM Interconnection 2750 Monroe Blvd. Audubon, PA 19403

Via Electronic Delivery

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Dear Stakeholders.

This correspondence conveys perspectives from the PJM Board of Managers (Board) on the filings related to enhancements to the interconnection process and adjustments to the capacity market. The Board expresses its sincere gratitude to all stakeholders for your thoughtful and robust engagement on these matters; your feedback helped to shape PJM's proposals and informed the Board's review and analyses of these efforts.

The Board is aware that the discussions on the matters addressed herein were advanced quickly. PJM finds great value in the contribution of its stakeholders and generally prefers as robust a process as possible for any given issue. This expedited process was necessary to be able to effectuate future capacity market auctions in accordance with the timeline reviewed by Federal Energy Regulatory Commission (FERC) in granting the extension in Docket No. ER25-118-000, as well as PJM's pressing reliability needs. In this instance, immediate action is required. As PJM has been warning for some time now, our region is experiencing a combination of trends that are rapidly tightening the supply-demand balance on our system. These trends include:

- Electrification coupled with the proliferation of high-demand data centers resulting in material forecasted load growth for the foreseeable future;
- Retirement of thermal generators at a rapid pace due to policy and economic pressures;
- Slow new entry of replacement generation resources due to a combination of industry forces, including siting, permitting and supply chain constraints; and
- The significant volume of resources in the interconnection queue that are being processed
 pursuant to the FERC's order on PJM's interconnection process reform, with a high proportion
 of the queue consisting of intermittent resources that don't have the same capacity value and
 operational characteristics as the retiring thermal generating fleet.

Taking the anticipated 2025 load forecast into account, the PJM system could see a capacity shortage as soon as the 2026/27 Delivery Year. To try and mitigate the risk of such an outcome, the Board supports the efforts outlined here that are intended to (1) bring capacity online more expeditiously through the interconnection queue; and (2) make sure price signals accurately reflect current supply-demand fundamentals. The suite of proposed filings is aimed at these objectives and addresses a generational change in our industry that requires both thought leadership and action. We do not expect that these filings, taken in aggregate, will fully resolve the resource adequacy challenge that we are facing, but we believe we must take the entire suite of actions to address the immediate reliability need. We expect for PJM and the stakeholders to continue to deliberate and act on this issue of utmost criticality and to bring their best proposals forward.

Board Supported Filings

Below is a description of filings that the Board supports, along with the Board's response to particular feedback we heard from stakeholders through discussion in the stakeholder process as well as through posted *ex parte* Board communications:¹

Capacity Interconnection Rights (CIR) Transfer Reforms

CIR Transfer Reforms were developed through the stakeholder process and were endorsed by the Members at the November 21 Markets & Reliability Committee and Member Committee meetings. The Board is pleased that stakeholders supported a reform package that will facilitate an expedited interconnection process for a replacement resource seeking to utilize the CIRs of a deactivating resource. As endorsed, the Replacement Generation Interconnection Process would stand alone outside of the PJM Cycle Process and operate in parallel. This better aligns the timing of de-energizing deactivating resources and the energizing of their replacements. The expedited timing allows replacement resources to execute an interconnection agreement sooner and also allows for their inclusion in RTEP models sooner to support reliability studies. PJM plans to make this filing early in 2025. This is a sensible reform effort that was stakeholder driven, and the Board supports it.

Surplus Interconnection Service (SIS)

PJM presented a proposal to streamline existing SIS Tariff provisions to allow for new generators that do not trigger transmission system upgrades to use an existing generator's unused interconnection capability and avoid being processed through the generation interconnection queue. An example of a resource pairing utilizing SIS is a renewable resource combined with battery storage. By taking a less restrictive approach to SIS, PJM will be in a better position to maximize system benefits and enhance resource adequacy without the need for additional network upgrades. The Board supports PJM's proposal, and PJM intends to make a near-term filing on SIS.

Reliability Resource Initiative (RRI)

The RRI represents a narrowly tailored, limited duration proposal designed to expedite the interconnection of a limited number of "shovel ready" generating resources that are not presently in the Transition Cycle #2 (TC2) interconnection queue. This proposal reflects the growing urgency to connect generating resources that have a high likelihood of being able to materially support resource adequacy and maintain grid reliability in the near term. Resources that are selected for participation in the RRI will be required to participate in the Reliability Pricing Model (RPM) auctions for 10 delivery years. Additionally, the current RRI proposal is fuel and technology neutral and allows all generating resources to apply including renewable generation.

Since the RRI proposal was initially presented to stakeholders at a special session of the Planning Committee on October 18, 2024, PJM has considered both the constructive and critical feedback received during that presentation and subsequent stakeholder meetings and discussions held in November. PJM also invited parties to file written

¹ This letter also serves as response to the myriad *ex parte* communications to the Board on these issues that PJM duly circulated to the Members Committee list and that are publicly available at this link: https://www.pjm.com/about-pjm/who-we-are/pjm-board/public-disclosures

comments. In response to extensive feedback, PJM made significant adjustments to its initial RRI proposal. Changes to the proposal included reducing the maximum number of qualifying RRI projects from 100 to 50, ensuring that all types of resources are eligible to apply by eliminating gating criteria in favor of a weighted scoring criteria, and adjusting scoring criteria and weighting (e.g., adding locational value).

While concerns have been expressed that the RRI proposal lacks sufficient foundation or a record of support, the facts on the ground show otherwise. As evidenced in PJM's energy transition analyses, including the Energy Transition in PJM: Resource Retirements, Replacements & Risks report (i.e., the "4R" report) from last year, the growth rate of electricity demand is likely to continue to increase from electrification coupled with the proliferation of large data centers in the region. Simultaneously, existing thermal generation is retiring at a rapid pace due to a combination of government and private sector policies and is outpacing new entry. Last, the recent pricing of capacity and a reduction in the reserve margin expresses a clear indication that new and immediate supply is needed on the system. If these trends continue as projected, we risk having insufficient resources later in this decade to maintain the reliable electric service that the public expects. This particular slide from PJM's presentation on the RRI is especially concerning. This slide shown below demonstrates that PJM will need anywhere from 62% to 100% of the resources currently in its queue to achieve commercial operation to maintain resource adequacy without additional intervention. The historical completion rate from the queue is approximately 10%.

Study Year: 2030/31 Forecasted Summer Peak: 167,876 Preliminary Forecast Pool Requirement: 0.9296		0% New Entry (GW)	40%* New Entry (GW)	62% New Entry (GW)	100% New Entry (GW)
1 1011	2025/26 ELCC Adjusted Offered Capacity*	145	145	145	145
Supply	ELCC Adjusted Forecasted Deactivations (2025-2030)	-17	-17	-17	-17
no	ELCC Adjusted New Resource Entry Rate	0%	40%	62%	100%
	ELCC Adjusted New Resource Entry	-	18	28	45
	Total ELCC Adjusted Available Capacity	128	146	156	173
ъ	Preliminary Reliability Requirement (Forecast Summer Peak * Forecast Pool Requirement)	156	156	156	156
	Balance Sheet	-28	-10	0	+17
stated /FPR. ource p	estimated FRR resources committed for the 25/26 Delivery Year. If when presenting the ELCC Class Ratings for the period, the RMFPR values are 'fi- Rather, they are the outcome of running the ELCC model using a specific assumed portfolio. In the than historical average.				

It is important to note PJM's load forecast will be increasing from these levels to reflect growing data center demand. This will exacerbate the need for new resources. We also recognize the criticism that the decision to allow certain new resources to join TC2 has the potential to impact other resources that are currently in the queue. However, the RRI proposal's accommodation of no more than 50 new resources is not intended or expected to destabilize the queue or otherwise lengthen the study time for the current TC2 projects, which are scheduled to be processed in 2025–26. The Board acknowledges that this initiative presents transmission cost uncertainty for projects currently in TC2. We took a hard look at various study alternatives to determine the impact with and without the additional

resources; however, this approach would introduce an unacceptable delay of six to eight months. Additionally, depending on the characteristics and location of a resource that participates in the RRI, it is possible that reduced transmission upgrade costs through a greater pool of participants could benefit projects that are currently awaiting processing in TC2.

In response to the states' position that the RRI proposal should not interfere with the states' authority over generating resources, we want to make clear that the RRI proposal does not infringe on such authority. Under the RRI proposal, the restructured states in PJM will continue to rely upon the competitive markets to attract private developers to construct generation resources, while the vertically integrated states would continue to definitively control their generation mix though the approval of their integrated resource plans. Regardless of the regulatory model, the goal of the RRI proposal is to have new resources enter the interconnection queue earlier, resulting in more megawatts on the system sooner than would be the case without the RRI.

Further, in written comments submitted by Pennsylvania Gov. Shapiro on November 20, 2024, the governor recommended that PJM rely on the expertise of the states in PJM to assist in the determination of an RRI project's viability in terms of state permitting and site readiness. We appreciate this suggestion and welcome any and all engagement from the states that would help PJM to determine a project's viability, subject to timing considerations and possible confidentiality restrictions.

The Board understands that the stakeholders are particularly divided on the RRI proposal. PJM's primary responsibility is to maintain grid reliability. It should not be an acceptable outcome to any PJM stakeholder to allow the grid to fail based upon financial or other interests. One needs only to recall the recent harm inflicted upon consumers during Winter Storm Uri in the Southwest as an example of the potential consequences for consumers should grid reliability be lost. Based upon all available data, including data embedded in this correspondence, PJM is facing a meaningful resource adequacy risk. Thus, for the benefit of grid reliability and consumers across the footprint, the Board supports PJM staff's RRI proposal.

Capacity Market Adjustments

PJM's capacity market is working as designed to reflect supply-demand conditions in the RTO. July's 2025/2026 Base Residual Auction (BRA) sent a signal reflecting the need for more capacity on the system. PJM is consistently seeking to perfect this marketplace because it is conscious that consumers ultimately will pay for the auction's results. Thus, the market should reflect supply-demand fundamentals and evolve as the system evolves. PJM staff has presented reforms that are modest, are sensible and reflect system realities. To note, these reforms were initially proposed by a combination of load interests and generation owners – a pairing of interests that is atypical in the PJM sphere.

Staff's proposal addresses four areas: (1) maintain a dual fuel combustion turbine (CT) as the reference technology as an input in to the Variable Resource Requirement (or demand) curve; (2) set a uniform non-performance charge rate at RTO Net Cost of New Entry (Net CONE) of the dual fuel CT; (3) remove reactive services from Energy & Ancillary Services Offset (compliance with FERC Order No. 904); and (4) include Reliability Must-Run (RMR) units in capacity market supply when they meet certain criteria.

1. Dual Fuel CT as Reference Technology

The Board supports PJM's proposal to maintain the dual fuel CT as the reference technology rather than moving to the combined cycle gas technology (CC) that was adopted in the 2022 Quadrennial Review of the VRR curve, and accepted by FERC to be implemented starting with the 2026/27 BRA. Using the dual fuel CT will mitigate the steepness of the curve and, for the most part, the issues associated with a \$0/MWd Net CONE. The Board heard questions regarding whether dual fuel CTs are being sited on the system and PJM responded in the affirmative.

2. Uniform Non-performance Charge Rate

The Board also supports PJM's proposal to implement a uniform non-performance charge rate at the RTO Net CONE. As PJM has explained, this will: (1) address significantly lowered risk of the lack of non-performance charges in zones where the Net CONE is \$0/MWd; (2) address arguments regarding discrimination given the non-uniformity of the penalty rate (ISO-NE implements a uniform non-performance charge rate across their footprint); and (3) establish broader, regional performance assessment intervals – or PAIs – rather than previous locational ones. In regard to stakeholder feedback on establishing a price cap by modifying the formula for Point A of the VRR curve, the Board is supportive of PJM's decision not to modify its formula for Point A at this time. Specifically, PJM has explained that its approach is consistent with other ISO/RTOs – such as the New York ISO's use of 1.5*Gross CONE, and ISO-NE's starting price being greater than or equal to Gross CONE – and that no studies have been conducted on the use of 1.5*Net CONE as a reasonable level. This topic is being discussed as part of the Quadrennial Review. The Board also understands that maintaining status quo of the reference unit to the VRR curve will effectuate the change of reducing the price cap for the next auction.

3. Removing Reactive Service Revenue Component From Net Energy and Ancillary Services Offset PJM also proposes to address one aspect of the compliance directive from FERC's final rule on Reactive Service Rates in Order No. 904 – to remove the reactive service revenue component from the Net Energy and Ancillary Services Revenue Offset for the Reference Resource and from the default minimum floor offer prices – as a severable part of its filing. The Board understands this will ensure the capacity market-related aspects of Order No. 904 are in place for the 2026/27 Delivery Year, which aligns with the anticipated 2026 effective date of the broader compliance directives.

4. Inclusion of RMR Units as Capacity Under Certain Criteria

Finally, the Board supports PJM's proposal to include RMR units as capacity market supply when they meet certain criteria. The Board heard feedback on various aspects of this proposal, but believes that the PJM proposal struck the appropriate balance to recognize the capacity value and thereby partially offset RMR costs to consumers who are paying for the RMRs, while ensuring resources counted as capacity can contribute in a manner comparable to other capacity resources. That is, the RMR unit must reasonably be expected to operate for the entire delivery year in accordance with applicable permits and legal restrictions; be required to be available for PJM dispatch in expectation of all PJM emergencies, so long as the unit is not on an outage; and have CIRs and be deliverable. Based on feedback received, PJM removed one of the criteria presented at the November 21 MC – that the RMR unit has available run hours greater than those expected to be needed for

transmission support. PJM heeded feedback that this would be too subjective and difficult to determine and the Board supports PJM's removal of this criteria.

5. Update: Other Capacity Market Reform Requests

- Enhancements to the Effective Load Carrying Capability (ELCC) framework have been brought to the stakeholder process via a new problem statement/issue charge. Our goal is to have these enhancements in effect for the 27/28 BRA.
- PJM would like to explore a sub-annual market construct with the stakeholders. This is a longer-term endeavor that will require more analytical rigor, but PJM does hope to move this effort forward soon.
- The Board is aware that PJM staff recently indicated its desire to make a separate filing on a "must offer" requirement for all resources with CIRs and related Market Seller Offer Cap (MSOC) changes in time for the 26/27 BRA. The Board supports PJM staff's exploration of the matter and its desire to consult with the stakeholders. The Board has yet to make a determination as to whether it supports such a filing. Rather, the Board wants to hear stakeholder feedback prior to making any such decision.

In summary, the PJM Board supports the staff in making filings to reform the CIR transfer process, the SIS process, the RRI and the four capacity market adjustments set forth above. The filings for SIS, RRI and the capacity market will be made soon after this correspondence is sent. The filing for CIR transfer will be made in early 2025. As to the "must offer" requirement, our understanding is that this filing would need to be made within the next few weeks in order for the requirement to be integrated into the 26/27 auction framework. Thus, the stakeholders should anticipate further correspondence expressing the Board's thoughts on that subject after the stakeholder consultation.

The Board again expresses our appreciation to the stakeholders on these critical and timely matters. You have been thoughtful in both bringing suggestions and proposals to PJM and providing feedback on them during stakeholder meetings.

Sincerely,

Mark Takahashi Chair, PJM Board of Managers