

Via Electronic Delivery

Mark Takahashi Chair, PJM Board of Managers

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Dear Advocates,

Thank you for your correspondence dated Aug. 30, 2024, wherein you express concern about the most recent Base Residual Auction (BRA or capacity auction) results and request that the PJM Board of Managers (PJM Board) take immediate action to require the participation of Reliability Must Run (RMR) units in capacity auctions.

At PJM, we work hard to balance concerns around affordability with our obligation to ensure reliability for the 65 million consumers in the PJM footprint, all while trying to assist states and the federal government in the advancement of their policy objectives.

We understand that many consumers are financially stressed right now, and we appreciate you raising questions around appropriate price signals for capacity given the current supply-demand balance on our system. As we consider these questions, it is important to first understand how we arrived here.

As PJM has been warning¹ for some time now, our region is experiencing a combination of trends that have served to rapidly tighten the supply-demand balance on our system. These trends include:

 Electrification coupled with the proliferation of high-demand data centers in the region that will result in material load growth

¹ See Energy Transition in PJM: Resource Retirements, Replacements & Risk (4R Report).

- Retirement of thermal generators at a rapid pace due to policy pressure as well as economics
- Slow new entry of replacement generation resources due to a combination of industry forces, including siting, permitting and supply chain constraints
- The high proportion of our interconnection queue that is composed of intermittent and limited-duration resources, many of which are valuable energy resources but are much less effective providers of capacity than the thermal resources they are replacing

Given these trends, it has become very clear that our region will require the buildout of a significant quantity of new generation, including a material amount of natural gas-fueled generation, in order to maintain the reliable electricity supply our consumers expect. It is in this context that the BRA for the 2025/2026 Delivery Year, in conjunction with the forward energy market, sent a new-build investment price signal. This signal is consistent with market fundamentals.

It is also important to note that these reliability concerns associated with reducing supply and increasing demand are not limited to PJM; the North American Electric Reliability Corporation (NERC) has identified elevated risk to the reliability of the electrical grid for much of the country outside of PJM. In fact, PJM is currently situated with a stronger reserve position than several other regions in the U.S.

In addressing the acute issue of Brandon Shores mentioned in your letter, the facts of what has occurred with these units are not in dispute:

- In November 2020 the units' owner, Talen, announced a "strategic repositioning of its power generation fleet that will eliminate the use of coal at all Talen wholly owned facilities." Talen's press release identified the Brandon Shores units in particular and stated that Talen "will cease coal-fired operations by the end of 2025 and repower pending approvals by state agencies."
- Subsequently, in December 2021, Raven Power Fort Smallwood LLC, a subsidiary of Talen and the
 owner/operator of the Brandon Shores units, filed a request for a determination from the Maryland Public
 Service Commission (PSC) that the proposed fuel-switching from coal to oil at the Brandon Shores units
 would not constitute a modification to the generation stations, signaling Talen's intent to move forward with
 the repowering of the facility.
- In January 2022, the Maryland PSC issued a decision confirming that the "proposed fuel-switching would not be considered a 'modification' under the *Public Utilities Article* § 7-205 ..." and approved the proposed fuel-switching from coal to oil, subject to certain conditions.
- Additionally, in parallel with Talen's press release and the Maryland PSC's proceeding described above,
 Talen contacted PJM in May 2021 to inquire about Brandon Shores' proposed fuel-switching from coal to
 oil. Talen also had subsequent discussions and meetings with PJM's transmission planning group on
 several occasions between May 2021 and August 2022 regarding whether any studies would be necessary
 to support the fuel conversion and to obtain information from PJM about requirements for PJM's upcoming
 capacity auction. Talen clearly communicated it was on a path to convert Brandon Shores to oil.

- PJM did not become aware that Talen had decided to pivot from its fuel conversion plan until April 6, 2023, when PJM received a deactivation notice for Brandon Shores. In that notice (which was provided in compliance with the PJM Tariff), Talen explained, for the first time, that although it had previously been working toward a conversion of the Brandon Shores units to fuel-oil combustion, it had determined that such a conversion would be uneconomic.
- Further, as you may be aware, Talen entered into a private agreement with the Sierra Club that prevents Brandon Shores from continuing to run without conversion beyond Dec. 31, 2025. PJM was not consulted on this agreement nor was PJM a party to the agreement.
- Shortly after receiving Talen's deactivation notice, PJM conducted a generator deactivation analysis, finding that the Brandon Shores retirement would result in over 600 reliability violations. PJM then acted quickly to initiate the process to find transmission solutions to resolve these violations. The PJM Board acted swiftly in approving these projects, as did the Federal Energy Regulatory Commission (FERC).

The sheer number of reliability violations resulting from the retirement of Brandon Shores indicates Maryland's urgent need for additional energy infrastructure. Brandon Shores (and Wagner) will be needed to preserve electric reliability for consumers in Maryland beyond their stated retirement dates and until required transmission is built. PJM's federally approved rules contemplate this scenario, and the rules provide the opportunity for retiring generation needed for grid reliability to operate under an RMR framework, pursuant to the PJM Tariff, until required transmission upgrades have been completed. There is a proceeding underway at FERC to discuss a possible RMR framework for Brandon Shores and Wagner (see FERC Docket No. ER24-1790). Further, there are currently discussions underway in the PJM stakeholder process that would allow for a more holistic planning effort in response to a generator deactivation notice submission.

As you note, PJM's current market rules (as approved by the FERC) do not require a deactivating resource to participate in a capacity auction, and PJM cannot require such participation if the resource is the subject of a valid must-offer exception. More particularly, Tariff, Attachment DD, section 6.6(g) explicitly provides that a resource qualifies for an exception to the capacity market must-offer requirement if it has a "documented plan in place to retire the resource prior to or during the delivery year, and has submitted a notice of Deactivation regardless of whether PJM has asked the unit to continue to operate beyond its requested deactivation date." These market rules make sense for several reasons:

- First, requiring participation of a deactivating unit in the capacity auction under the existing RMR agreements could distort the price signal and fail to incent the new build needed in Maryland and in the rest of the regional transmission organization (RTO). With Maryland already importing ~40% of its annual electricity needs from other states and the RTO needing new generation build to keep up with the combined effects of demand growth and generator retirements, suppressing this price signal now is likely to result in greater reserve shortfalls in the future. Additionally, suppressing this price signal now could discourage other forms of resources, such as Demand Response and other resources that may be available on shorter notice from increasing their market participation precisely at the time they are most needed.
- Second, requiring such market participation from a resource following a deactivation notice could have unintended market consequences for existing resources. For example, a generator that had the opportunity to

continue operating by investing in technologies meant to lower emissions may decide to retire instead of investing in those technologies due to the lower price signal, thereby exacerbating reliability problems down the road.

- Third, a resource that intends to retire but is being forced to offer into the capacity market is likely to be
 more reluctant to agree to an RMR arrangement. This will be deleterious to maintaining system reliability.
 The obligations of being a capacity resource and any associated performance penalty risks may be a bridge
 too far for that unit owner. PJM views RMR arrangements as a last resort but a necessary action to keep
 units temporarily operational in order to maintain system reliability.
- Finally, in this instance it is our understanding that Talen's agreement with the Sierra Club precludes
 Brandon Shores from operating as a capacity resource beyond Dec. 31, 2025, unless the units convert to
 oil.

Further, these are the market rules that have been in place for many years and have been approved by the FERC. You make reference to rules currently in place for other Independent System Operators (ISOs). Each ISO/RTO has different market constructs and thus different rules for how RMR arrangements should be accounted for in those markets. NYISO, for example, has a significantly different market construct than PJM. In the case you cite related to NYISO, FERC did not definitively address this idea of "double counting" for RMR resources that are deemed needed for resource adequacy. In fact, the NYISO Orders cited by you were limited to a determination of the required offer price that RMR units are required to offer into NYISO auctions. On rehearing, FERC merely noted that it was unable to discern under what circumstances NYISO would need an RMR unit for resource adequacy, and thus, under NYISO's proposal, the unit should not be subjected to an offer floor.² On the other hand, PJM's treatment of RMR units' participation in ongoing capacity auctions is similar to those of the Midcontinent Independent System Operator (MISO).

For all of these reasons, we believe it would be counterproductive to try to change our market rules prior to the next BRA to force RMR units to offer into capacity auctions.

However, there are other actions we believe are important to pursue to try to ensure that market prices correctly reflect the supply-demand challenge we are experiencing. There are also actions we can pursue to enable the fastest possible supply response to these market signals.

1) Certain resource types, such as wind, solar, batteries and hydro, don't currently have a must-offer requirement. Many of these resources did in fact offer in the previous auction. However, several generators did not. Given how tight the supply-demand balance could be for the next auction, PJM will work with our Independent Market Monitor (IMM) to request information from these generators to ensure each decision to not offer a resource is economically justified on a stand-alone basis based upon current market conditions. Resources without a must-offer requirement generally should be evaluated to ensure that their decision not to offer is justified on a stand-alone basis and is not being done for the purposes of benefiting other units in the resource owner's portfolio. PJM should be given the ability to mandate participation in the capacity auction if there is found to be an exercise of market power.

² New York Independent System Operator, Inc., 161 FERC P 61,189 (2017).

2) There are several resources that have requested a must-offer exception for the 2026/2027 BRA because they intend to retire. PJM will work with our IMM to request information from these generators to ensure that these decisions to retire are still justified on a stand-alone basis.

PJM will work with the IMM to address any issues that may arise prior to the next auction. Further:

- 1) We intend to advance a proposed expedited framework to "fast-track" some incremental generation interconnection projects for consideration by our members in the near future.
- 2) We believe it is appropriate to review the choice of reference unit and shape of the demand curve, and we have launched an expedited quadrennial review to do this.

Additionally, PJM is certainly willing to have a more fulsome discussion on the issues you raise related to deactivating units and their positioning within our markets. There is currently a Deactivation Enhancements Senior Task Force (DESTF) that is convening to discuss particulars around deactivating units, and this discussion is perhaps best suited for that task force. The PJM Board respectfully requests that the Members focus attention on the DESTF and accomplish the tasks set out in the Task Force's issue charge. The DESTF has been meeting for some time now and should complete its work as soon as practicable.

Again, we thank you for your correspondence and your focus on these important issues. To note, this PJM Board correspondence is meant to be responsive to the additional correspondences received on this topic.³

Sincerely,

Mark Takahashi

Mark Takahashi Chair, PJM Board of Managers

³ Public Interest Organizations' Correspondence; PSA/P3 Correspondence.