

To: Manu Asthana President and CEO PJM Interconnection, L.L.C.

> PJM Board of Managers c/o Mark Takahashi, Chairman 2750 Monroe Boulevard Audubon, PA 19403

> > November 13, 2023

Re: PJM Interconnection's Role in the Maryland Energy Transition

Mr. Asthana, Mr. Takahashi, and the Board:

Maryland is on the cusp of a major milestone for the health of its residents and stability of the climate—the closure of every coal-burning power unit in the state. On September 29, 2023, AES submitted a deactivation notice for its coal-fired Warrior Run plant, which became the final coal plant in Maryland to announce a retirement date.¹ These deactivations are the result of PJM's competitive markets that have enabled new entry by lower-cost generation resources in recent years, as well as Maryland state policies that have incentivized the construction of renewable energy resources throughout the PJM footprint, including distributed energy resources. It is well past time to retire coal generators that are too expensive to run during most hours of the year, and often have mechanical problems when PJM is counting on them during severe winter weather events.²

But PJM Interconnection's rules and processes are hampering this progress. PJM's response to the recently announced retirement of Brandon Shores, a coal-fired power plant located in Anne Arundel County, illustrates the risks of failing to proactively plan for the retirement of large coal generators. While Talen is seeking to retire Brandon Shores in June 2025, PJM has asserted that the coal plant must remain online through a costly reliability-must-run agreement

¹ See PJM, Generation Deactivations, <u>https://www.pjm.com/planning/service-requests/gen-deactivations</u>.

² See Eric Gimon, "99% Of U.S. Coal Plants Are More Expensive Than New Renewables. A Coal-To-Clean Transition Is Worth \$589 Billion, Mostly In Red States," Forbes (Jan. 30, 2023), https://www.forbes.com/sites/energyinnovation/2023/01/30/99-of-us-coal-plants-are-more-expensive-than-new-renewables-a-coal-to-clean-transition-is-worth-589-billion-mostly-in-red-states/?sh=63497ad12510;">https://www.forbes.com/sites/energyinnovation/2023/01/30/99-of-us-coal-plants-are-more-expensive-than-new-renewables-a-coal-to-clean-transition-is-worth-589-billion-mostly-in-red-states/?sh=63497ad12510;">https://www.forbes.com/sites/energyinnovation/2023/01/30/99-of-us-coal-plants-are-more-expensive-than-new-renewables-a-coal-to-clean-transition-is-worth-589-billion-mostly-in-red-states/?sh=63497ad12510;">https://www.forbes.com/sites/energyinnovation/2023/01/30/99-of-us-coal-plants-are-more-expensive-than-new-renewables-a-coal-to-clean-transition-is-worth-589-billion-mostly-in-red-states/?sh=63497ad12510;">https://www.forbes.com/sites/energyinnovation/2023/01/30/99-of-us-coal-plants-are-more-expensive-than-new-renewables-a-coal-to-clean-transition-is-worth-589-billion-mostly-in-red-states/?sh=63497ad12510;">https://www.forbes.com/sites/energyinnovation/2023/01/30/99-of-us-coal-plants-are-an-infirm-resource/64132 Of the plants are an infirm resource (Jan. 30, 2023), https://www.utilitydive.com/spons/winter-storm-elliott-proved-fossil-fuel-plants-are-an-infirm-resource/64132 Of the plants are an infirm resource (Jan. 30, 2023), htttps://www.utilitydive.com/spons/winter-storm-e

until around 2028, when it hopes to have completed nearly \$800 million worth of transmission upgrades to address reliability issues created by the plant's deactivation.³

Ensuring the timely retirement of every coal plant in Maryland is crucial for the state's transition to clean energy, not only because coal plants are particularly harmful to public health, but also because retiring coal plants frees up more space on Maryland's transmission system for new sources of renewable energy and energy storage.

In a letter sent today to Governor Moore, we are urging the Maryland government to do everything in its power to rapidly enable the clean energy transition. This includes rapid implementation of statutory authority to deploy 750 megawatts (MW) of storage by 2027 and 3 gigawatts (GW) by 2033,⁴ increase solar adoption to obtain 14.5% of the state's required renewable capacity by 2030,⁵ build out offshore wind to reach 8.5 GW by 2031, and develop a distribution system that is prepared for more distributed energy resources and increased demand from newly electrified loads.⁶

But there is only so much the state can do on its own, given that PJM controls so many of the processes essential to maintaining reliability while transitioning away from fossil generation to renewable, storage, and distributed generation. PJM has already begun several processes to address barriers to retiring aging coal plants like Brandon Shores, but needs to do much more:

- PJM's current interconnection queue, while recently reformed, is still moving too slowly to
 facilitate the rapid development of new renewable energy resources and energy storage.
 The fundamental solution to this is proactive transmission planning that accounts for state
 renewable energy requirements. But PJM can also help make progress in the near-term
 by creating a fast-track for the transfer of capacity interconnection rights. A stakeholder
 process is already underway to examine this reform, but PJM's commitment to rapidly
 implementing stakeholder-vetted solutions is essential.
- PJM must do better at anticipating generator deactivations and planning the transmission system in a way that reflects likely retirements. PJM has produced numerous reports concerning the pace of the energy transition, and has undertaken some forecasting of generator retirements, but it has not integrated these forecasts into a holistic long-term transmission planning process. As an illustration, PJM has recently begun a Long-Term Regional Transmission Planning process, but it is not yet clear that PJM recognizes the urgency of planning for generator retirements through this process to ensure that the most efficient transmission can be built, following a competitive process, to obviate the need for reliability-must-run agreements.

- ⁵ Maryland Energy Administration, Solar Renewable Energy Certificates (SRECs) Explained (June 16,
- 2020), https://news.maryland.gov/mea/2020/06/16/solar-renewable-energy-certificates-srecs-explained/.
- ⁶ Md. Pub. Util. Code § 7–802.

³ PJM Transmission Expansion Advisory Committee, *Generation Deactivation Notification Update* (June 6, 2023),

https://www.pjm.com/-/media/committees-groups/committees/teac/2023/20230606/20230606-item-02---gen eration-deactivation-notification-update.ashx.Talen filing.

⁴ Md. H.B. 910 (2023).

- PJM must also have a more comprehensive set of solutions at hand to cost-effectively
 address reliability issues created by generator deactivations. Currently, PJM does not
 consider whether energy storage could be deployed as a transmission asset, even though
 this may be a lower-cost and more quickly implemented alternative to conventional
 transmission facilities. Nor does PJM evaluate any alternatives to reliability-must-run
 agreements. These agreements can be extremely expensive, but the money spent on
 them does not support long-lived grid assets. Especially in situations where PJM has
 more extended notice of a deactivation—as in the case of Brandon Shores—PJM should
 utilize a competitive process to identify lower-cost ways to provide the grid with reliability
 services, rather than assuming that continued operation of a retiring coal plant is the only
 way forward.
- Maryland will need significant additional transmission capacity in order to bring the mandated 8.5 GW of additional offshore wind generation online; in fact, the 2023 POWER Act tasks the Public Service Commission and PJM with developing solutions for expanding the transmission system to interconnect with new offshore wind installations.⁷ PJM must move expeditiously to plan these expansions so that Maryland's valuable offshore wind resource can be developed as quickly as possible.

In sum, PJM must seize the opportunity to collaborate with states like Maryland, especially where the need to address reliability issues aligns with state policies to deploy new clean energy resources. For instance, while Maryland can and will ensure that much-needed energy storage is deployed in the state, cooperation with PJM will be essential to identify the areas of greatest value for these resources on the transmission system. PJM should ensure that it does not stand in the way of achieving the clean energy goals broadly endorsed by Maryland voters simply because it has failed to prepare the grid for the retirement of older coal plants or the deployment of new renewable resources, such as offshore wind.

Sierra Club recognizes that it is essential to maintain a reliable grid, while also protecting Maryland ratepayers from paying excessive energy bills. At the same time, it is critical for PJM and Maryland to take tangible action to mitigate the climate crisis and reduce unhealthy air pollution throughout the state. On behalf of our nearly 15,000 members in Maryland, we are calling on both the state of Maryland and PJM to work together to enable the timely retirement of coal plants and the development of a cleaner, more affordable, and more reliable grid for the region.

Sincerely,

Josh Tulkin Director, Sierra Club, Maryland Chapter

Shruti Bhatnagar Conservation Chair, Sierra Club, Maryland Chapter

Cc: Evelyn Robinson

⁷ Md. Pub. Util. Code § 7–704.3(b)(1).