UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Innovations and Efficiencies in	
Generator Interconnection	

Docket No. AD24-9-000

POST-WORKSHOP COMMENTS OF PJM INTERCONNECTION, L.L.C.

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PJM Interconnection, L.L.C. ("PJM") submits these comments following the Federal Energy Regulatory Commission's ("FERC" or "Commission") September 2024 workshop regarding innovations and efficiencies in generator interconnection in the above-referenced docket.¹ These post-workshop comments are intended to provide the Commission with a further update on the status of PJM's generation interconnection process, as well as respond to several statements made by other parties in order to ensure a complete and accurate record in this proceeding.

I. MOTION TO FILE COMMENTS OUT-OF-TIME

As noted below, PJM is already a party to this proceeding. PJM moves to intervene outof-time in this Docket No. AD24-9-000. PJM has good cause for failing to timely file these comments due to the press of other business, specifically, administering the Expedited Process and Transition Cycle #1 of PJM's reformed interconnection process as well as developing other initiatives highlighted in these comments. Moreover, granting this motion will neither result in any disruption of this proceeding nor prejudice the existing parties to this proceeding. PJM also has a direct, substantial, and independent interest in this proceeding, which no other party can adequately represent. Thus, PJM hereby respectfully requests the Commission grant this motion

¹ Innovations and Efficiencies in Generator Interconnection, Docket No. AD24-9-000 (Sep. 12, 2024).

and accept these comments for consideration in the above-captioned proceeding and in any future rulemaking efforts undertaken as a result of the record in this proceeding.

II. PJM GENERATION INTERCONNECTION PROCESS UPDATE

In Donnie Bielak's September 11, 2024 testimony on behalf of PJM under this same docket,² Mr. Bielak provided an overview of the status of PJM's current interconnection transition. For reference, that same timeline for the aforementioned process is illustrated below:

Figure 1: PJM Interconnection Planning Transition Timeline³



Since the workshop was held in early September, PJM has continued to make significant progress towards tendering service agreements for the Expedited Process or "Fast Lane" projects. To date, approximately 75% of the Fast Lane projects have been processed, with approximately 15 GW having agreements that have been issued for negotiation or execution or have been executed. PJM tendered for negotiation fifty-nine of these projects, totaling 9 GW, in the month of October alone. PJM is on track to issue all Fast Lane project agreements for

² Innovations and Efficiencies in Generator Interconnection, Statement of Donald Bielak, P.E. on Behalf of PJM Interconnection, L.L.C., Docket No. AD24-9-000 (Sep. 11, 2024).

³ PJM Interconnection, L.L.C., *Planning: Cycle Timeline* (as of June 24, 2024 at 7:42 AM), <u>https://www.pjm.com/planning</u>.

negotiation before the end of January 2025. Furthermore, PJM's Transition Cycle No. 1 remains on track as Phase II of the aforementioned cycle is well underway with 204 projects currently progressing within the cycle. Additionally, the gating approach incorporated into PJM's cycles has allowed Transition Cycle No. 2 to remain on schedule, with an application deadline of December 17, 2024.⁴ All of this data serves as further proof that PJM's reformed interconnection process is making demonstrated progress in achieving the goal of expeditiously processing interconnection projects. The transition schedule, is designed to allow for PJM to process and study years' worth of backlogged project submissions in notably less time as compared to its previous serial-based generation interconnection queue process.

III. PJM RESPONSES TO COMMENTS MADE DURING TECHNICAL CONFERENCE

PJM provides the following comments in response to specific comments made by other

parties during the workshop in order to ensure a complete and accurate record in this proceeding.

A. Order No. 2023, PJM's Transition to a "First-Ready, First Served" Interconnection Queue, and PJM's Reliability Resource Initiative Proposal

PJM agrees with Commissioner Christie's statement regarding the importance of Order No. 2023 in prioritizing generation projects that need to be constructed and brought online quickly.⁵ In advance of Order No. 2023, PJM developed a reformed interconnection process and, on July 10, 2023, PJM initiated its transition from a "first come, first served" to a "first ready, first

⁴ On November 13, 2024, PJM sent a notification setting the Application Deadline for Transition Cycle #2 for December 17, 2024. PJM Interconnection, L.L.C., *PJM Transition Cycle #2 Application Deadline set for December 17, 2024* (Nov. 13, 2024); *see also* PJM Interconnection, L.L.C., *PJM, Stakeholders Discuss Proposals Addressing Capacity Market Rules, Reliability Resource Initiative and Interconnection Surplus* (Nov. 11, 2024), <u>https://insidelines.pjm.com/pjm-stakeholders-discuss-proposals-addressing-capacity-market-rules-reliability-resource-initiative-and-interconnection-</u>

 $[\]underline{surplus/\#:\sim:} text = Dec.\% \ 2017\% \ 20 is\% \ 20 the\% \ 20 application, status\% \ 20 quo\% \ 20 rules\% \ 20 will\% \ 20 prevail.$

⁵ Innovations and Efficiencies in Generator Interconnection, *Final Transcript of Day Two of the Innovations and Efficiencies in Generator Interconnection Workshop* (Docket No. AD24-9-000) (hereinafter "Workshop Day Two Transcript"), at 258-59.

served" process. PJM ran its first cluster-based studies in Transition Cycle No. 1 and required additional site control and readiness deposits to demonstrate readiness to build. This approach is designed to facilitate more efficient processing of large numbers of interconnection requests.

In response to Constellation's comments regarding its 135 MW uprate,⁶ PJM recognizes that Constellation likely was seeking to show support for an expedited reliability process, but Constellation failed to mention that the timeline referenced was jointly developed by PJM and its members as part of the Interconnection Process Reform Task Force ("IPRTF"). The package of reforms to the generation interconnection process culminating from the IPRTF, which included Constellation's referenced timeline, was overwhelmingly supported by PJM membership.

To address American Electric Power Company, Inc.'s comment,⁷ once PJM has fully transitioned to its new cluster-based process, processing times are expected to decrease compared to PJM's former serial-based process. Following the completion of the transition process, new projects will be studied as part of Cycle 1, currently scheduled to begin early 2026. Notwithstanding the improvements to the interconnection process, PJM recognizes that during the temporary conditions of this transition process there may be a need to prioritize shovel-ready projects to quickly support resource adequacy.⁸ PJM supports the concept of using Effective Load Carrying Capability thresholds as one measure to be used in determining eligibility for an expedited queue and prioritize high-impact projects.⁹

⁶ Innovations and Efficiencies in Generator Interconnection, *Final Transcript of Day One of the Innovations and Efficiencies in Generator Interconnection Workshop* (Docket No. AD24-9-000) (hereinafter "Workshop Day One Transcript"), at 202.

⁷ *Id.* at 224-25.

⁸ See PJM Interconnection, L.L.C., *Reliability Resource Initiative MRC Update* (Nov. 7, 2024), <u>https://www.pjm.com/-/media/committees-groups/committees/mrc/2024/20241107-special/item-04---reliability-resource-initiative---presentation.ashx</u>.

⁹ See, e.g., Workshop Day One Transcript, at 232-33.

To address the Commission's comments regarding the prioritization of queue projects,¹⁰ PJM recognizes that there is likely a need for additional mechanisms that quickly bring generation online. One such mechanism involving the replacement of retiring generators through an expedited process has been developed by PJM and its stakeholders and is currently endorsed at the committee level. If approved by the members, this enhanced Capacity Interconnection Rights transfer process would allow for such projects to efficiently utilize existing infrastructure and land to come into commercial operation more quickly than the traditional generation interconnection route.¹¹

B. Winter Storm Uri

PJM disagrees with the assertion that the PJM transmission system was a limiting factor on Southwest Power Pool's ("SPP") ability to import during SPP's load-shed event.¹² During Winter Storm Uri, PJM's Reliability Engineering team, responsible for coordinating with neighboring entities, initiated contact with its counterparts at SPP, even though PJM has no direct ties with SPP. This coordination came from a desire to maintain overall system reliability and provide assistance to SPP during a load-shed event. Following Winter Storm Uri, FERC and North American Electric Reliability Corporation ("NERC") issued the following reports that accurately reflect the events that transpired, and neither report contains information that supports SPP's assertion.

In "The February 2021 Cold Weather Outages in Texas and the South Central United States | FERC, NERC and Regional Entity Staff Report," the Commission stated: "[s]pecifically, MISO

¹⁰ Workshop Day Two Transcript at 261.

¹¹ See PJM Interconnection, L.L.C, *Enhancing CIR Transfer Efficiency – Solution Package* (Oct. 30, 2024), <u>https://www.pjm.com/-/media/committees-groups/committees/mrc/2024/20241030/20241030-item-07---1-</u> <u>enhancing-capacity-interconnection-rights-transfer-efficiency---presentation.ashx</u>.

¹² Workshop Day One Transcript at 45.

was able to import large amounts of power from neighbors to the east (e.g. PJM Interconnection, LLC), and SPP was able to transfer some of that power through MISO. Those east-to-west transfers into MISO peaked at nearly 13,000 MW on February 15.¹³ To put that in perspective, PJM set an all-time export record during the event, as documented with the statement: "While PJM was providing assistance to MISO and other adjacent [Balancing Authorities], it observed an all-time record net export transfer across connecting tie lines of approximately 15,700 MW" and willingly entered Emergency Procedures to maximize these exports in an effort to support SPP to our fullest ability. In short, SPP's assertion that PJM's transmission system was somehow a limiting factor on SPP's importations is wide of the mark. The constraints SPP references would have not prevented SPP from doing so.

C. Surplus Interconnection Service

Clearway Energy Group is only partially correct in its assumptions regarding surplus interconnection service.¹⁴ Under PJM's current surplus interconnection service rules, any new grid connected resource *which is also requesting to operate simultaneously with the existing resource* would introduce additional electrical current during fault conditions onto the transmission system. Connecting the generators on the DC side of an inverter would be a viable option as discussed in PJM Manual M-14H.¹⁵ However, it is not the only option for surplus interconnection service. Under current rules, connections on the AC side of the inverter may be permitted if there is a lockout to prevent both resources from operating simultaneously.¹⁶

¹³ FERC, *The February 2021 Cold Weather Outages in Texas and the South Central United States / FERC, NERC and Regional Entity Staff* Report (Nov. 16, 2021) at 14, <u>https://www.ferc.gov/media/february-2021-cold-weather-outages-texas-and-south-central-united-states-ferc-nerc-and</u>.

¹⁴ Workshop Day Two Transcript at 303-04.

¹⁵ PJM, *Manual 14H: Transmission Operations*, § 12.1.1 (rev. 00, July 26, 2023), <u>https://pjm.com/-/media/documents/manuals/m14h.ashx</u>.

¹⁶ Id.

PJM continues to recognize the desire to utilize surplus interconnection service as a means to bring additional resources online quickly. Surplus interconnection service does not increase the overall capacity of the resource but does increase the energy deliverability which could lead to greater reliability if the existing resource is unable to deliver when required by system conditions. This is why, in addition to the Reliability Resource Initiative under development, PJM is exploring potential changes to its surplus interconnection service requirements in consultation with its members.¹⁷

D. Response to Comments Regarding Moratorium on Transmission Outages

PJM does not have a moratorium on transmission outages as Cypress Creek Renewables

implies.¹⁸ Per PJM Manual M-03 Section 4.2.6 "Peak Period Outage Scheduling Guidelines":

Transmission Owners should avoid scheduling any outage in excess of 5 days in duration with a restoration time greater than 72 hours that may result in increased risk to system reliability during peak summer and winter periods. These periods are defined as June 15 – September 15 and January 1 – February 28, respectively.

Due to the risk of having other unexpected forced outages during the peak periods, the outages resulting in the following conditions with a restoration time greater than 72 hours will be denied:

- Actual or post-contingency thermal or voltage issues with insufficient generation for control.
- Constraints that are load sensitive with limited controlling actions.
- Stability issues.
- Bottled generation.
- Localized congestion requiring significant generation reduction to control.
- Non-localized congestion requiring wide-spread generation reduction to control.

¹⁷ See PJM Interconnection, L.L.C., *Reliability Resource Initiative MRC Update* (Nov. 7, 2024), <u>https://www.pjm.com/-/media/committees-groups/committees/mrc/2024/20241107-special/item-04---reliability-resource-initiative---presentation.ashx</u>.

¹⁸ Workshop Day Two Transcript at 456-57.

Transmission Owners shall screen for such outages prior to submittal in eDART and look to reschedule these outages during non-peak periods. PJM may grant exception to ensure RTEP upgrades are installed within specified timeframes or as special circumstances warrant.¹⁹

As previously stated, this manual language does not constitute a moratorium. Instead, PJM imposes more restrictive transmission outage guidance in an effort to preserve overall system reliability. This guidance allows Transmission Owners to properly schedule their work around dates which historically pose more or less risk to reliability. However, ultimate approval of outage scheduling is performed on an individual basis by PJM Operations as the NERC-registered Transmission Operator ("TOP") and Reliability Coordinator ("RC").

¹⁹ PJM, *Manual 03: Transmission Operations*, § 4.2.6 (rev. 66, May 22, 2024), <u>https://pjm.com/-</u>/media/documents/manuals/m03.ashx.

IV. CONCLUSION

PJM respectfully requests the Commission to consider these comments in any future

rulemaking efforts undertaken in, or as a result of, the record in this proceeding.

Respectfully submitted,

By: <u>/s/ Vasiliki Karandrikas</u>

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CERTIFICATE OF SERVICE

I hereby certify that this day I caused to be served the foregoing document upon each person

designated on the official service list compiled by the Secretary in this proceeding.

Dated at Audubon, PA this 18th day of November, 2024.

/s/ Vicki Karandrikas

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