## UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

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PJM Interconnection, L.L.C.

Docket No. ER22-962-005

### COMMENTS OF THE INDEPENDENT MARKET MONITOR FOR PJM

Pursuant to Rule 211 of the Commission's Rules and Regulations, <sup>1</sup> Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor ("Market Monitor") for PJM Interconnection, L.L.C. ("PJM"),<sup>2</sup> submits these comments responding to the filing submitted in this proceeding by PJM Interconnection, L.L.C. ("PJM") on September 1, 2023 ("September 1<sup>st</sup> Filing"). The September 1<sup>st</sup> Filing was submitted in compliance with the Order No. 2222, issued September 17, 2020, and the order issued in this proceeding, March 1, 2023 ("March 1<sup>st</sup> Order").<sup>3</sup>

Order No. 2222 requires RTOs to revise their tariffs to accommodate participation of distributed energy resources (DERs) in the wholesale market. Order No. 2222 defined DER as "any resource located on the distribution system, any subsystem thereof or behind a customer meter" and included demand response resources in the definition. The stated goal of Order No. 2222 is to remove barriers for small distributed resources to enter the wholesale

<sup>&</sup>lt;sup>1</sup> 18 CFR § 385.211 (2023).

<sup>&</sup>lt;sup>2</sup> Capitalized terms used herein and not otherwise defined have the meaning used in the PJM Open Access Transmission Tariff ("OATT"), the PJM Operating Agreement ("OA") or the PJM Reliability Assurance Agreement ("RAA").

<sup>&</sup>lt;sup>3</sup> See Participation of Distributed Energy Resource Aggregations in Markets Operated by Regional Transmission Organizations and Independent System Operators, Order No. 2222, 172 FERC ¶ 61,247 (2020) ("Order No. 2222"), order on reh'g, Order No. 2222-A, 174 FERC ¶ 61,197 (2021), order on reh'g, Order No. 2222-B, 175 FERC ¶ 61,227 (2021); PJM Interconnection, L.L.C., 182 FERC ¶ 61,143 (2023) ("March 1<sup>st</sup> Order").

market by allowing them to aggregate. The Commission's goals are clear and would, if implemented appropriately by PJM, enhance competition as intended. But clear and enforceable rules defining products and the requirements for DER participation in PJM markets are essential to the continued efficient and competitive functioning of PJM markets and are not barriers to be removed.

The September 1<sup>st</sup> Filing is flawed because: it allows for double payment of net energy metering resources; it undermines efficient, reliable dispatch with multinodal aggregation of resources; it does not clarify rules for DER with the ability to both curtail load and inject power; and it does not include provisions for market monitoring of component DER and host EDCs.

Maintaining the nodal market design is essential to the efficiency of the PJM markets. It is a founding principle of the PJM markets without which the market cannot function competitively or effectively.

As with other significant market innovations, distributed energy will evolve in anticipated and unanticipated ways. Distributed energy could be disruptive to the wholesale power markets in both productive and nonproductive ways. Increasing the opportunities to compete is productive and will enhance competition. The risk of not getting the rules right from the outset is that nonproductive rules will gain inertia and vested interests and be much more difficult to fix in the future.

The Commission should direct PJM to modify the September 1<sup>st</sup> Filing. The Commission should direct PJM to revise its proposed rules for DER as follows: the determination of whether there is disallowed double payment for ancillary services for net metering resources should be based on whether the DER is credited for ancillary services rather than whether it provides ancillary services; the proposed provisions for multinodal aggregation should be removed; the rules for DER with the ability to both curtail load and inject power should be clarified for the energy market and added for the capacity and ancillary services markets; and the PJM Market Monitoring Plan (OATT Attachment M) should include provisions clarifying that the Market Monitor's role includes the collection of

information and explanations from EDCs and DERA for actions taken on the distribution system affecting the PJM market.

## I. COMMENTS

## A. Double Payment is Double Counting.

The September 1<sup>st</sup> Filing proposes (at 11–12) to modify the definition of double counting from being "credited" for the same service to "providing" the same service through an existing retail program. This will allow Component DERs that are compensated at a full retail rate including compensation for ancillary services to be able to participate in the PJM ancillary services markets if the Component DER does not actually "provide" ancillary services. The September 1<sup>st</sup> Filing states that the change follows the Commission's directive in the March 1<sup>st</sup> Order that draws a distinction between providing a service and being credited for a service.<sup>4</sup> The September 1<sup>st</sup> Filing further states (at 15) that while recognizing that "certain net energy metering rates may credit customers for the cost of wholesale ancillary services, PJM is not aware of any retail program in its territory that permits Component DER to provide ancillary services at this time."

A resource should not be paid for a service unless it provides the service. Otherwise, the Electric Distribution Company ("EDC") is overpaying the net energy metering resources. Whether or not the EDC is overpaying net energy metering resources, the resource has made the decision to participate and receive its compensation for energy, capacity, and ancillary services in a retail market program. Because the retail market program includes credits for wholesale market ancillary services charges, there cannot be separate participation in the PJM ancillary services market without resulting in duplicative payments to the resource. If the net energy metering rate explicitly states that it includes compensation for wholesale ancillary

<sup>&</sup>lt;sup>4</sup> March 1<sup>st</sup> Order at P 136 ("Being credited for a product may not be the same as providing a service. This difference may be relevant because a Component DER participating in a net energy metering retail program, for example, may be credited for a product or service that it does not actually provide. As a result, it is unclear whether PJM's proposed tariff fully complies with this requirement.")

services, the net energy metering resources should be precluded from participating in the wholesale ancillary services markets. The Commission should reject PJM's proposed definition of double counting and require PJM to base its double counting determination on the services credited in the net metering program.

#### B. Multinodal Aggregation Will Undermine Nodal Market Principles.

The September 1<sup>st</sup> Filing (at 20–28) explains how essential it is to keep the PJM market nodal. The PJM market was designed from the beginning in 1999 as a nodal market because nodal markets provide efficient price signals to generation injections in an economically dispatched, security constrained market. Allowing multinodal aggregation does not improve the nodal market; it undermines it. The Market Monitor explained in previous comments that it is impossible to define a "rarely" constrained area in which multinodal aggregation could be allowed.<sup>5</sup> Constraints are dynamic and often simultaneous and have changed dramatically in PJM over the last 10 years. In addition, as the September 1st Filing correctly points out (at 27), future congestion will be different from previously observed congestion, especially considering the expected growth of DERs that would inject power. In other words, growing participation of DERs is going to increase the uncertainty in predicting future congestion patterns which makes it even more difficult to define a "rarely" constrained area. Even if one could identify a group of pricing nodes that do not have an impact on a particular constraint, it is very likely that they will have an impact on another constraint. Even if that group of pricing nodes does not have impact on any constraint at one point in time, it is very likely that they will have an impact on a constraint, or multiple constraints, at another time.

Despite emphasizing the importance of preserving a nodal market, the September 1<sup>st</sup> Filing (at 29–31) proposes to allow multinodal aggregation for small resources that satisfy four conditions. Regardless of those conditions, aggregation across nodes is going to prevent

<sup>&</sup>lt;sup>5</sup> Comments of the Independent Market Monitor for PJM, Docket Nos. ER22-962-001, -002 (April 18, 2022) at 5-8 ("April 18 Comments").

PJM from effectively controlling constraints and will distort the market signal. Multinodal aggregation creates a mismatch between price signals and the actual locational need for resources. Nodal dispatch is central to PJM's ability to effectively perform constraint control for reliability purposes. Dispatch of resources at a nodal level ensures that varying LMP will result in a predictable effect on transmission constraints. The ability to adjust LMP and the expected response of resources at a nodal level are inextricably linked and integral to the efficient functioning of wholesale markets. Multinodal dispatch is contrary to this capability meaning that LMP would no longer correlate with effective constraint control and would diminish PJM's ability to maintain a reliable, well-functioning wholesale market.

PJM will have to figure out how to mitigate or ignore the market inefficiency created by the multinodal aggregation. Some stakeholders at PJM's DER and Inverter-Based Resources Subcommittee argued that since a few other ISOs allow multinodal aggregation, PJM also should do so if PJM cannot prove unique characteristics of its own that are different from those ISOs.<sup>6</sup> PJM is not required to prove that it is unique in order to refrain from filing flawed market rules. That some other ISOs are willing to sacrifice market efficiency is not a sufficient reason to expect PJM to compromise its market integrity. The September 1<sup>st</sup> Filing makes clear that PJM prefers single node market aggregation and cannot sustain multinodal aggregation in the long run. As the Market Monitor explained in previous comments, there is no logical reason for a competitive, efficient locational energy market to artificially aggregate price signals to injections across nodes for any purpose.<sup>7</sup> The Commission should reject PJM's proposal to allow multinodal aggregation for small Component DERs.

<sup>&</sup>lt;sup>6</sup> See PJM stakeholder discussion of multimodal aggregation which can be found at <<u>https://www.pjm.com/committees-and-groups/closed-groups/dirs</u>>.

<sup>&</sup>lt;sup>7</sup> April 18 Comments at 6, July Comments at 2-3.

## C. PJM Should Establish Clear and Transparent Rules for Component DERs that Can Both Curtail and Inject.

The March 1<sup>st</sup> Order (at P 106) requires PJM to specify market rules for Component DERs with both curtailing and injecting capability. The September 1<sup>st</sup> Filing proposes (at 10–11) energy market rules for curtailing and injecting Component DERs but it does not specify any rules for the other markets. If PJM's intention is to allow DER Aggregations ("DERAs") that include curtailing and injecting Component DERs only in the energy market, then it should clearly state that in the PJM tariff. If PJM expects these resources to participate in the capacity and/or the ancillary services markets, then PJM should propose clear tariff language that would apply to such resources and markets.

Curtailing and injecting Component DERs will create issues if they enter the PJM markets without clear rules. In particular, clarity is required to avoid potential double payment for capacity. For example, consider a curtailing and injecting Component DER with a 3 MW peak load contribution ("PLC") and a behind the meter generator with a 5 MW capacity interconnection right ("CIR"). If the only source of load reduction is the behind the meter generator, then the total capacity awarded to the Component DER should not exceed 5 MW. If the resource is awarded 3 MW as demand response resources and 5 MW as generator, then 3 MW is double counted, because the total capability that the resource can provide is only the 5 MW of behind the meter generation. Lack of clarity also exists in the proposed energy market rules which are simply references to economic load response rules and energy market revenue data for settlements rules. The September 1st Filing does not propose, for example, a maximum injection MW limit for the resource type. There is no rule in the existing tariff nor in the proposed tariff that would prevent these resources from receiving double compensation for capacity, as in the example. The Commission should require PJM to clarify the ambiguity in the energy market rules and add capacity and ancillary services market rules for curtailing and injecting Component DERs to the tariff.

# D. The Commission should Clarify the Market Monitor's Authority in EDC and DERA Market Power Mitigation and Market Monitoring.

The March 1<sup>st</sup> Order recognizes that DERAs introduce a new form of market interaction among DER aggregators as market participants, EDCs as host utilities, and PJM as the market operator. PJM, the Market Monitor, and the Commission have recognized that some EDCs will have incentives to behave noncompetitively in this interaction because EDCs can also compete in the market as DER aggregators.<sup>8</sup> In compliance, the September 1<sup>st</sup> Filing clarifies some of the boundaries of the new interaction by, for example, limiting (at 52) the scope of the EDC's review of new DERA to incremental impacts from aggregation that were not considered during the interconnection process and ensuring (at 47) that all information shared with PJM is accessible by both the EDC and the DERA. However, the September 1<sup>st</sup> Filing does not and cannot fully prevent the exercise of market power by EDCs in the PJM DERA market.

The case of EDC overrides of PJM dispatch instructions presents a situation where EDCs may exercise market power by controlling the output of their competitors. But the September 1<sup>st</sup> Filing is explicit that PJM will "not take any actions to interrupt or interfere" with an EDC override. This provision not only does not satisfy the directive in the March 1<sup>st</sup> Order (at P 354) that requires PJM's tariff ensure the override "protocols and processes are non-discriminatory and transparent," but it may prevent PJM and the Market Monitor from mitigating a potential exercise of market power by an EDC. PJM may not even know whether a change in DERA offer behavior is the result of an EDC override or a decision made by the DERA. Even if PJM declines to ask questions or otherwise get involved, the Market Monitor has a responsibility to follow up on any market offer behavior that may indicate market manipulation or an exercise of market power. The Market Monitor will need to know that an

<sup>&</sup>lt;sup>8</sup> See PJM Order No. 2222 Compliance filing (February 1, 2022) at 15-16; *Comments of the Independent Market Monitor for PJM*, Docket No. ER22-962 (April 21, 2022) at 4-8; and March 1<sup>st</sup> Order at P. 334.

override took place both for monitoring potential market manipulation and for monitoring compliance with the tariff rules regarding market power mitigation of energy offers and parameters.

The need for the Market Monitor to collect information from EDCs, DERA, and Component DER is not only limited to the case of EDC overrides. A variety of decisions may occur by entities operating at the distribution system level that will impact the competitiveness of the PJM market with the introduction of DERA. The Market Monitor's ability to collect information from all relevant entities should not be hindered by specific rules that limit PJM's role and access to information. The ongoing effectiveness of market monitoring under Order No. 2222 must be ensured. The Market Monitor recommends that the Commission require PJM to include in OATT Attachment M provisions clarifying that the Market Monitor's role includes the right to collect from EDCs and DERA information on and explanations for actions taken on the distribution system affecting the PJM market. EDCs and DERA should be required to cooperate with the Market Monitor, including providing information that the Market Monitor requests from them.

#### **II. CONCLUSION**

The Market Monitor respectfully requests that the Commission afford due consideration to these comments as it resolves the issues raised in this proceeding.

Respectfully submitted,

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Dated: September 22, 2023

### **CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Eagleville, Pennsylvania, this 22<sup>nd</sup> day of September, 2023.

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