UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C.	)	Docket No. ER22-962-000, -001

COMMENTS OF THE INDEPENDENT MARKET MONITOR FOR PJM

Pursuant to Rule 211 of the Commission's Rules and Regulations,[1] Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor ("Market Monitor") for PJM Interconnection, L.L.C. ("PJM"),[2] submits these comments on the response submitted in this proceeding by PJM Interconnection, L.L.C. ("PJM") on July 7, 2022 ("July 7th Response") to the request for additional information issued May 18, 2022 ("May 18th Request"). This proceeding concerns the filing submitted by PJM on February 1, 2022 ("February 1st Filing"), in compliance with Order No. 2222, issued September 17, 2020.[3] The May 18th Request and the July 7th Response reveal the still unresolved, crucial issues related to nodal market design, market power mitigation, and the role of the electric distribution companies. Maintaining the integrity of the PJM markets as the role of DER grows depends on protecting the reliability and efficiency of the nodal market while ensuring competitive market outcomes. The PJM proposal under Order No. 2222 would not achieve that essential goal.

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1 18 CFR § 385.211 (2022).

2 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").

3 *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).

I. COMMENTS

Filings in this matter show that the stated expectations about the rate of growth of distributed energy resources ("DERs") and DER aggregation resources ("DERAs") in the PJM wholesale markets vary widely among stakeholders. The assertion by some stakeholders that DER will have only a negligible effect on PJM markets is used to justify weakening elements of the PJM market design that are necessary to maintain reliability and competition. But the entire point of developing these new rules is to facilitate a significant expansion of DERs. The new rules should and must be designed for the future. PJM market design has failed in the past when it was based on the assumption that bad rules would have only a minimal effect. The new rules will create inertia that is difficult or impossible to reverse in the future. The goal should and must be to get it right, the first time. Establishing rules that ensure that all resources can compete on an equivalent footing is essential and will enhance competition and strengthen reliability. Establishing weak rules will create a new resource type that PJM cannot rely on as a reliable and competitive substitute for existing resources.

PJM is a nodal market. PJM became a nodal market after the failure of zonal markets to provide accurate price signals consistent with reliable constraint control. To price and dispatch resources in the market based on aggregations would be a step backward in both the reliability and economics of the PJM market. The July 7th Response provides ample explanation of the reliability needs for maintaining the nodal energy market. New rules should include all resources in the nodal design, rather than excluding some resources from the nodal design. Uniform adoption of the nodal design will strengthen the reliability and competitiveness of PJM markets and directly link PJM's system control for reliability to the economics of all resources. Aggregation across nodes in any and all PJM markets, including the capacity and the ancillary services markets, will undermine the nodal market design and weaken the design for all resources. The market cannot work in the long run if it is nodal only for some. The fact that some existing rules undercut the nodal design is not justification for creating new and broader problems. For example, the Market Monitor has recommended

that PJM require demand resources to provide their nodal location and that PJM clear the capacity market based on nodal capacity resource locations.[4] The fact that demand resources are allowed to aggregate across nodes is not a reason to extend that failed design to a much broader and more significant set of new resources. PJM market design should be about extending what works, the nodal design, and not weakening standards to the lowest common denominator.

The Commission's question IV.2.b. asks PJM to explain how to transition to a multinodal model for DER in the future.[5] The July 7th Response refers to vague potential changes in technological infrastructure that might support a multinodal model. But there is no technology that makes a multinodal model more accurate or more reliable. A multinodal model means, by definition, that PJM would treat resources at different pnodes as if they were one. The loss of accuracy, loss of efficient dispatch, and erosion of reliability are inherent in the multinodal model. Better communication and better dfax data, as the July 7th Response describes (at 28), would provide dispatchers with better information about what is happening with a DERA at a nodal level. These improvements are appropriate and would make nodal dispatch even more effective and efficient. Any dispatch and pricing at a multinodal level undermines the market and reliability. The goal of implementing a multinodal model is not clear, given that it is clearly inferior to the nodal model, as the experience of ISO/RTOs across the U.S. demonstrates. If the issue is settlements related, multinodal and aggregated settlements are efficient and effective, and already available under the nodal market design.

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4 *See* 2022 State of the Market Report for PJM: January through March, Vol II. (May 12, 2022) at 300 and 356.

5 Question IV.2.b. implies that it is only data limitations that would prevent PJM from implementing a multinodal model, but the issue is not data limitations. A multinodal model is one that uses less data by ignoring locational details in dispatch and pricing. There is no amount of additional data that would enhance the efficiency of multinodal dispatch and pricing that ignores nodal data by aggregating across nodes.

The July 7th Response claims the exemption from the Market Seller Offer Cap ("MSOC") for DERAs that include injecting DERs that are co-located with retail load is not a concern based on unsupported and unsupportable assertions about various factors acting in concert.[6] The point of market power mitigation rules is to ensure competitive outcomes. If PJM is correct and the relevant DERAs behave in a competitive fashion, the existence of consistently applied market power mitigation rules will cause no harm. The reverse is clearly not true. The absence of consistently applied market power mitigation rules creates the potential for the exercise of market power and noncompetitive market outcomes, to the detriment of all market participants. The July 7th Response also claims the exemption from the Market Seller Offer Cap ("MSOC") for DERAs that include injecting DERs that are co-located with retail load is consistent with existing rules for DR. But the assertion mischaracterizes those resource types as DR. The exemption is also inconsistent with other proposed rules for cost-based offers in the February 1st Filing. The February 1st Filing proposes to require single node aggregation (at 48–51) and cost-based offers (at 36) for DERAs in the energy market because PJM recognizes that these resources are capable of injecting energy into the grid, unlike DR resources. The July 7th Response does not provide any arguments to explain why DERAs with injecting DERs that are co-located with load are treated differently in the energy market than in the capacity market. Considering the nature of the resource, most DERs are likely to be co-located with retail loads. The July 7th Response treats the same resources differently for purposes of market power mitigation in the capacity and energy markets. PJM treats DERAs both as resources with injection capability and as resources without such capability. PJM is half right. DERAs do have injection capability. DERAs should be subject to the consistent application of all market power mitigation rules.

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6 July 7th Response at 12 ("These resources are multi-use installations, developed with a purpose to serve retail load, and will have inherent size restrictions due to site loads and distribution interconnection processes. These factors act in concert to minimize the market power concerns.").

The Commission's Request for Information acknowledges the fact that PJM's proposal creates many opportunities for electric distribution companies ("EDCs") to erect barriers to entry. In the small utility opt in process (at Questions I.1 and I.2), PJM's proposal would have EDCs interpret the decisions of the RERRA about participation through a small utility rather than PJM interpreting directly. In the proposed processes for awarding capacity interconnection rights ("CIRs") to DERAs (at Question III.A.5.b), in verifying double compensation (at Questions III.C.1.a and III.C.2.a) and in the registration and the preregistration processes (at Question VIII.A.2.a, VIII.A.4.e, and VIII.A.5.a-e.), the proposed rules create opportunities for EDCs to hinder access to PJM markets by competitive DER aggregators. Without rules that eliminate the exercise of market power by EDCs, it is reasonable to expect that EDCs will exercise market power. The most efficient way to prevent the exercise of market power is to prevent EDCs from participating as DER aggregators.

The interconnection of DERs and DERAs is complex, including both interconnection to the EDC and the corresponding interconnection to the PJM grid at a PJM node. The failure of the PJM proposed design to require that DERs and DERAs pay for their own interconnection rights to the PJM grid means that all transmission customers will pay for those interconnection rights. PJM has recently made clear in the Planning Committee Special Session: Capacity Interconnection Rights for ELCC Resources, that such costs can be extremely high.[7] In those Special Sessions, PJM has estimated that simply incorporating the CIR costs for the next tranches of intermittent and storage resources into the RTEP will cost other transmission customers about two billion dollars. Regardless of whether CIRs are paid for directly by DERs or by the EDCs they are located in, and regardless of how the interconnection to the EDC is handled, all new resources should pay their own costs of interconnection to the PJM grid, consistent with the longstanding PJM market design

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[7] PJM Planning Committee Special Session–Capacity Interconnection Rights for ELCC Resources. June 24, 2022 <https://www.pjm.com/committees-and-groups/committees/pc.aspx>.

principle that has worked effectively to ensure that new entrants face the appropriate incentives about where to locate on the grid. Those costs should not be imposed on other transmission customers.

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: July 28, 2022

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 28th day of July, 2022.

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