UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Cube Yadkin Generation, L.L.C.	)	Docket No. EL19-51-000
v.	)	
PJM Interconnection, L.L.C.	)	

ANSWER AND MOTION FOR LEAVE TO ANSWER OF THE INDEPENDENT MARKET MONITOR FOR PJM

Pursuant to Rules 212 and 213 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 this answer in support of, and moves for leave to answer, the answers filed by PJM in the above referenced proceeding on March 21, 2019. PJM correctly applied the filed approach when performing the electrical distance test. The filed approach is too lenient and allows participation in the PJM capacity markets of resources that are not comparable to the internal resources they would displace if cleared. The rules should more clearly define a substitute capacity resource in order to protect the efficiency and competitiveness of the PJM capacity market. The criticism of how PJM applied the filed approach has no merit and the complaint should be denied.

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1 18 CFR §§ 385.212 & 385.213 (2018).

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").

I. ANSWER

A. The Electrical Distance Test Was Performed as Described in the Stakeholder Process for the Determination of Pseudo Tie Eligibility.

The Market Monitor supports PJM's response and agrees that the electrical distance test was performed consistent with the approach filed and approved by the Commission in the External Capacity Enhancements filings.[3] It was also consistent with PJM's explanation in the stakeholder process prior to filing. The complaint amounts to a collateral attack on PJM's filed rules and should be denied.

The operational modeling concerns of adding new pseudo tied generation were discussed in meetings of the PJM Underperformance Risk Management Senior Task Force (URMSTF). It was at these meetings where the electrical distance test was discussed and where PJM explained that the electrical distance test was explicitly "… related to the operational risk and complexity of expanding and maintaining external network models."[4] During the stakeholder process, PJM initially presented a geographic alternative to determining electrical distance, but abandoned that approach for the electric distance calculator approach to allow for a "… simple, consistent, engineering based comparison metric."[5] PJM's approach was and is intended to define the standards for pseudo tied units that is consistent with ensuring that the external units are close substitutes for internal units and therefore consistent with the operation of a competitive PJM capacity market.

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[3] *See PJM Interconnection, L.L.C.*, 161 FERC ¶ 61,197 (2017).

[4] *See* PJM, Operational Modeling (Electric Distance) Related Questions (Dec. 7, 2016), which can be accessed at: <*http://www.pjm.com/~/media/committees-groups/task-forces/urmstf/20161207/20161207-item-03-electrical-distance-update.ashx*>.

[5] *See* PJM, Electrical Distance Review (Au. 17, 2016), which can be accessed at: <*https://www.pjm.com/-/media/committees-groups/task-forces/urmstf/20160817/20160817-item-08-electrical-distance-review.ashx*>.

During the stakeholder process, PJM presented a map that showed preliminary minimum electrical distance results.[6] At that time, there were no objections or questions regarding what model was used or whether the results were what might be expected using independent calculations. The preliminary analysis presented at the URMSTF clearly showed results based on calculations using the method as PJM described.

Intervenors show that using a different model with different characteristics than PJM's model but still applying the standards based on PJM's model produces different results. That is not surprising. It also shows nothing of significance. It does demonstrate that the models and standards must be consistent.

Had PJM presented results using the Transmission Adequacy & Reliability Assessment (TARA) model, which Dr. Simmons points out and PJM agrees would reflect lower impedances than calculated using the PJM method, with a 0.065 p.u. threshold, the results would have defined a much larger number of units as electrically close to PJM.[7] That is just stating the obvious, which is that more units would qualify if the standard were weakened. But the standard should be maintained in order to maintain competitive markets. The owners of external units have an interest in receiving PJM capacity market payments, but PJM and its members have a more important interest in ensuring that external units can provide the same services as internal units if they are to be PJM capacity resources. The number of such units is very limited, by definition. If the weaker standard were applied, a large number of units, which would require significant network model builds, would pass that electrical distance test. But if the TARA model had been used, PJM would have selected a minimum electric distance impedance in order to maintain a reliable

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6 *See* PJM, Electrical Distance Review (Sept. 12, 2016), which can be accessed at: <*https://www.pjm.com/-/media/committees-groups/task-forces/urmstf/20160912/20160912-electrical-distance-update.ashx*>.

7 PJM, Attachment A (Baranowski Affidavit) at 5 para. 13.

network model and therefore to be consistent with competitive markets. The electrical distance test results would be the same for each unit using the TARA model with an appropriately lower impedance threshold as they are using PJM's existing method using the appropriately higher 0.065 p.u. threshold. PJM made clear throughout the stakeholder process and in their filings the intent of the electrical distance test, and the results have been consistent with that intent. The assertion that PJM described an approach that was weaker than actually filed is not correct. The complaint is without support and should be denied.

B. The Filed Approach Is Too Lenient; External Capacity Resources Must Be Full Substitutes for Internal Capacity Resources.

If the PJM Capacity Market is to function to create efficient and competitive prices and to provide appropriate incentives for entry and exit, all capacity resources must be substitutes. This is a fundamental principle of market design. External capacity resources, if allowed, must provide the same reliability and operational attributes as internal capacity resources. If external capacity resources cannot fully substitute for internal capacity resources, they are inferior products and should not permitted in the PJM capacity market because they will suppress the price for internal resources and produce inefficient market outcomes.[8] That is counter to the interests of the PJM market, counter to the interests of PJM generation and counter to the interests of PJM load. PJM market rules governing the role of external units have evolved substantially in recent years to be substantially more consistent with this market design principle. PJM's filing on the requirements for pseudo tied units is the latest step in that evolution.

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[8] The Market Monitor has demonstrated this impact in its review of the Base Residual Auctions. *See* Market Monitor, Analysis of the 2021/2022 RPM Base Residual Auction: Revised (Aug. 24, 2018) at 5–6; 27–28; 78–82, which can be accessed at <*http://www.monitoringanalytics.com/reports/Reports/2018/IMM_Analysis_of_the_20212022_RPM_BRA_Revised_20180824.pdf*>.

A pseudo tie should be a minimum requirement for external capacity resources to offer in the PJM Capacity Market. A pseudo tie is a necessary but not sufficient condition to be a full substitute for internal capacity resources. A pseudo tie gives PJM significant but not complete dispatch control over the energy from capacity resources and ensures that the energy output, when available, belongs to PJM by incorporating that energy output in PJM's Area Control Error (ACE). But the rules do not make such external units the equivalent of internal units based on their contribution to the reliability and operational requirements of PJM. External units are subject to transmission constraints that are outside the control of PJM and external units can be directed to take actions inconsistent with PJM dispatch under some circumstances. The rules established in the External Capacity Enhancements filings were put in place to allow external generation to participate in the PJM Capacity Markets by defining units that can meet certain reliability and operational guidelines. The filed rules requiring pseudo ties are an improvement over the prior rules. However, the Market Monitor believes that even these requirements fall significantly short of providing the needed protection. PJM should not permit participation in the PJM Capacity Market by external units that do not meet the fundamental requirement of being a full substitute for internal generation regardless of electrical distance or any other current criteria. Arguments criticizing PJM's enforcement of the current inadequate rules for evaluating pseudo ties have no merit and should be disregarded.

II. MOTION FOR LEAVE TO ANSWER

The Commission's Rules of Practice and Procedure, 18 CFR § 385.213(a)(2), do not permit answers to answers or protests unless otherwise ordered by the decisional authority. The Commission has made exceptions, however, where an answer clarifies the issues or assists in creating a complete record.[9] In this answer, the Market Monitor provides the

[9] *See, e.g., PJM Interconnection, L.L.C., 119 FERC ¶61,318 at P 36 (2007)* (accepted answer to answer that "provided information that assisted … decision-making process"*); California Independent*

Commission with information useful to the Commission's decision-making process and which provides a more complete record. Accordingly, the Market Monitor respectfully requests that this answer be permitted.

System Operator Corporation, 110 FERC ¶ 61,007 (2005) (answer to answer permitted to assist Commission in decision-making process); *New Power Company v. PJM Interconnection, L.L.C.*, 98 FERC ¶ 61,208 (2002) (answer accepted to provide new factual and legal material to assist the Commission in decision-making process); *N.Y. Independent System Operator, Inc.*, 121 FERC ¶61,112 at P 4 (2007) (answer to protest accepted because it provided information that assisted the Commission in its decision-making process).

III. CONCLUSION

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

Respectfully submitted,

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Dated: April 10, 2019

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 10th day of April, 2019.

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