

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

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|--|---|--------------------------|
| PJM Interconnection, L.L.C.                    | ) | Docket No. ER17-2218-000 |
|  | ) |                          |
| Midcontinent Independent System Operator, Inc. | ) | Docket No. ER17-2220-000 |
|  | ) |                          |
|  | ) | (not consolidated)       |
|  | ) |                          |

**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 for PJM<sup>2</sup> (“Market Monitor”), submits these comments responding to the revisions filed on August 1, 2017, by PJM and the Midcontinent Independent System Operator, Inc. (“MISO”), to their Joint Operating Agreement (“JOA”). The proposed revisions are intended to address increased demand for pseudo ties in MISO in order to permit capacity exports from MISO to PJM.

The Market Monitor agrees that the proposed pseudo tie rules are an improvement over the existing rules. The Market Monitor does not object to the pseudo tie provisions, which recognize the reliability needs of MISO and PJM. The reliability needs of both MISO and PJM must be recognized. But the reliability needs of MISO are not consistent with MISO units serving as complete substitutes for PJM internal capacity resources. The

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<sup>1</sup> 18 CFR § 385.211 (2017).

<sup>2</sup> PJM Interconnection, L.L.C. (“PJM”). 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”), the Reliability Assurance Agreement (“RAA”), or the JOA.

existence of a pseudo tie agreement compliant with the defined rules cannot be considered evidence that an external capacity resource is a substitute for an internal capacity resource. The proposed pseudo tie rules are a necessary but not sufficient condition to be an external capacity resource.

## **I. COMMENTS**

### **A. External Capacity Resources Must Be Full Substitutes for Internal Capacity Resources.**

If the PJM Capacity Market is to function effectively and result in competitive prices and in appropriate incentives for entry and exit, all capacity resources must be substitutes. This is a fundamental principle of market design. External capacity resources must provide the same reliability and operational attributes as internal capacity resources. If external capacity resources cannot be full substitutes for internal capacity resources, they are inferior products and should not be permitted in the PJM Capacity Market because they will suppress the price for internal resources and result in an inefficient market outcome. 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.

A pseudo tie should be a minimum requirement for external capacity resources to offer in the PJM Capacity Market. However, a pseudo tie is a necessary but not sufficient condition to be a full substitute for internal capacity resources. A pseudo tie should give PJM dispatch control over the energy from capacity resources and ensures that the energy output belongs to PJM by incorporating that energy output in PJM's Area Control Error (ACE). But the pseudo tie JOA provisions create substantial uncertainty about the extent to which a pseudo tie can actually provide that control to PJM because the JOA provisions explicitly create substantial exceptions to that control.

The Market Monitor has previously identified issues with PJM's approach to relying on pseudo ties as a complete basis for designation as an external capacity resource.<sup>3</sup> All those issues remain and are amplified by the proposed JOA changes.

The proposed JOA changes include allowances for nonrecallability, suspension and termination of pseudo ties that depend on actions by MISO. These provisions change the reliability and operational attributes that PJM can expect from an external capacity resource compared to an internal capacity resource. As a result, external capacity resources subject to these rules are not full substitutes for internal capacity resources.

The Market Monitor agrees that the proposed pseudo tie rules are an improvement over the existing rules. The Market Monitor does not object to the pseudo tie provisions, which recognize the reliability needs of MISO and PJM. The reliability needs of both MISO and PJM must be recognized. But the reliability needs of MISO are not consistent with MISO units serving as complete substitutes for PJM internal capacity resources. The existence of a pseudo tie agreement compliant with the defined rules cannot be considered evidence that an external capacity resource is a substitute for an internal capacity resource. The proposed pseudo tie rules are a necessary but not sufficient condition to be an external capacity resource.

**B. The Nonrecallability Provisions Do Not Permit External Capacity Resources to Be Full Substitutes for Internal Capacity Resources.**

The proposed provision on nonrecallability includes language that allows for a pseudo tied external capacity resource to be committed, de-committed or re-dispatched by the Native Reliability Coordinator (MISO for an external PJM capacity resource) in the event of a local system operating limit (SOL) (in MISO) or interconnection reliability operating limit (IROL) (in MISO).

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<sup>3</sup> See "Comments of the Independent Market Monitor for PJM," Docket No. ER17-1138 (March 30, 2017).

The NERC Glossary of Terms Used in Reliability Standards defines a SOL as “The value (such as MW, MVar, Amperes, Frequency or Volts) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. SOLs are based upon certain operating criteria. These include, but are not limited to: i) Facility Ratings (Applicable pre- and post- Contingency equipment or Facility ratings); ii) Transient Stability Ratings (Applicable pre- and/or post-Contingency Stability Limits); iii) Voltage Stability Ratings (Applicable pre- and/or post-Contingency Voltage Stability); and iv) System Voltage Limits (Applicable pre- and post-Contingency Voltage Limits).”<sup>4</sup>

The NERC Glossary of Terms Used in Reliability Standards defines an IROL as “The value (such as MW, MVar, Amperes, Frequency or Volts) derived from, or a subset of the System Operating Limits, which if exceeded, could expose a widespread area of the Bulk Electric System to instability, uncontrolled separation(s) or cascading outages.”<sup>5</sup>

IROLs are not a frequent occurrence. However, local SOLs, particularly facility ratings, can be considered a normal occurrence that system operators deal with on a daily basis. Allowing for an external capacity resource to be committed, de-committed or re-dispatched by the Native Reliability Coordinator in the event of a local system operating limit (SOL) or interconnection reliability operating limit (IROL) effectively removes control from the Attaining Balancing Authority and means that the pseudo tied external capacity resource is not actually under the control of PJM and therefore not equivalent to or a substitute for an internal capacity resource.

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<sup>4</sup> NERC Standards, “Glossary of Terms Used in NERC Reliability Standards,” <[http://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary\\_of\\_Terms.pdf](http://www.nerc.com/pa/Stand/Glossary%20of%20Terms/Glossary_of_Terms.pdf)> (August 1, 2017).

<sup>5</sup> *Id.*

Further, these provisions give the authority to the Native Balancing Authority to provide dispatch instructions directly to the pseudo tied unit, and only if “time permits” will those instructions go through PJM, essentially taking the control of a capacity resource away from PJM.

The proposed Section 11.3.5 of the JOA states:

PJM and MISO agree that the pseudo-tied unit is non-recallable to the extent it is committed as a PJM Generation Capacity Resource or MISO Capacity Resource for a Delivery Year to ensure that the unit will not be directed to serve load in the Native Balancing Authority Area at a time when the Attaining Balancing Authority Area requires the output of the unit. However, a pseudo-tied unit may be committed, de-committed or re-dispatched, for local SOL or IROLs by the Native RC per the PJM – MISO Pseudo-Tied Units Operating Procedure or Safe Operating Mode. If time permits, any instructions to a pseudo-tied unit will go through the Attaining Balancing Authority. PJM and MISO agree that any energy produced by the pseudo-tied unit during the transmission emergency will be delivered to the Attaining BA.

This provision creates substantial uncertainty as to whether a pseudo tied external capacity resource can be available and under the dispatch control of PJM when needed. As a result, pseudo tied external capacity resources cannot be considered a complete substitute for internal capacity resources under this provision of the proposed pseudo tie rules.

**C. The Suspension Provisions Do Not Permit External Capacity Resources to Be Full Substitutes for Internal Capacity Resources.**

The proposed provisions on Suspension include language that allows a pseudo tied external capacity resource to be decommitted by the Native Balancing Authority (MISO for an external PJM capacity resource) with immediate notice in the event certain criteria are met.

The proposed Section 11.3.7 of the JOA states:

PJM and MISO reserve the right to suspend a pseudo-tie if the entity that pseudo-tied the unit no longer satisfies the PJM or MISO requirements for pseudo-ties, criteria for participation in the Attaining Balancing Authority’s markets as an external resource, or other applicable requirements (as detailed in

respective PJM and MISO tariffs and manuals), if the entity that pseudo-tied the unit commits a material default under its pseudo-tie agreement or has failed to cure any breach of such agreement, or if PJM or MISO reasonably determines that the pseudo-tie poses a risk to system reliability or risk of violation of established reliability criteria, by giving immediate notice of suspension. Suspension shall be coordinated between PJM and MISO and may include but not be limited to decommitting the unit or requiring the unit to follow manual dispatch instructions. During any suspension period, the pseudo-tied generating unit shall remain under the operational control of the Attaining Balancing Authority and shall not be under the operational control of Native Balancing Authority.

This provision creates substantial uncertainty as to whether an external capacity resource can be available when needed. It is not clear if PJM will still have the rights to any energy produced by a pseudo tied unit during a suspension in the sense that the energy would automatically contribute to PJM's ACE. It is not clear how the manual dispatch of energy would be treated in the PJM ACE. It is not clear whether the output of a pseudo tied external capacity resource would need to be block scheduled using NERC Tags during a suspension. If that were the case, it would make the unit ineligible to be a capacity resource in PJM.

The suspension provision creates uncertainty about the reliability of pseudo tied external capacity resources. As a result, pseudo tied external capacity resources cannot be considered a complete substitute for internal capacity resources under this provision of the proposed pseudo tie rules.

**D. The Notice of Termination Provisions Do Not Permit External Capacity Resources to Be Full Substitutes for Internal Capacity Resources.**

The proposed provision on notice of termination includes language that allows for a pseudo tied external capacity resource to be terminated with as little as 60 days' notice under certain circumstances. The termination of a pseudo tied external capacity resource would mean that the capacity resource could no longer be a capacity resource.

The proposed Section 11.3.9(b) of the JOA states:

(b) The Balancing Authority seeking to terminate the pseudo-tie of any Generation Resource for the reasons described in this subsection (b) shall give the other Balancing Authority and the entity that pseudo-tied the unit at least sixty (60) days' written notice of such termination request.

(i) The entity that pseudo-tied the unit into the Attaining BA no longer satisfies the Attaining BA's or Native BA's requirements for pseudo-ties, or

(ii) The entity that pseudo-tied the unit into the PJM BA no longer satisfies PJM's criteria for participation in its markets for an external resource, or

(iii) The entity that pseudo-tied the unit into the Attaining BA commits a material default of the terms of the pseudo-tie agreement with Attaining BA or Native BA, or

(iv) The entity that pseudo-tied the unit into the Attaining BA has failed to cure any breach of such agreement, or

(v) The Attaining BA or Native BA experiences an emergency or other unforeseen, adverse condition that may impair or degrade the reliability of the transmission system such as, but not limited to, a transmission constraint that impairs the reliability of the Attaining BA's or Native BA's transmission system or a condition that causes the pseudo-tied unit to become undeliverable.

This provision creates uncertainty as to whether an external capacity unit can be available when needed. As a result, pseudo tied external capacity resources cannot be considered a complete substitute for internal capacity resources under this provision of the proposed pseudo tie rules.

## II. CONCLUSION

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

Respectfully submitted,



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Dated: August 22, 2017

## 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 August, 2017.



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