

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

Potomac Economics, Ltd. ) Docket No. EL17-62-000  
v. )  
PJM Interconnection, L.L.C. )  
                                  )

**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 complaint filed by Potomac Economics Ltd. ("April 5<sup>th</sup> Complaint") on April 5, 2017. Potomac Economics seeks to remove the requirement under the PJM market rules that External Capacity Resources have pseudo ties. The pseudo tie rule is a necessary but not sufficient condition to ensure that external capacity can provide capacity that is a substitute for capacity provided by internal resources.<sup>3</sup>

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<sup>1</sup> 18 CFR § 385.211 (2016).

<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") or the Reliability Assurance Agreement ("RAA").

<sup>3</sup> The Market Monitor has raised concerns that the specific standards adopted and filed by PJM and currently under review in another proceeding are too lax. *See* Comments of the Independent Market Monitor for PJM, ER17-1138-000 (March 30, 2017).

The April 5<sup>th</sup> Complaint attempts to make PJM responsible for issues that are clearly within the authority of MISO and NYISO to address directly. If MISO and NYISO do not like the impact of pseudo ties, MISO and NYISO should create rules to address the issues rather than demanding a change in the fundamental nature of the PJM Capacity Market.

The April 5<sup>th</sup> Complaint has no merit and should be denied.

## I. COMMENTS

### A. The Logic of the April 5<sup>th</sup> Complaint Is Faulty.

The April 5<sup>th</sup> Complaint asserts (at 3) that PJM's pseudo tie requirement "has already imposed substantial economic and reliability costs on the Midcontinent Independent System Operator, Inc. ("MISO") that will only grow as pseudo-ties proliferate" and "threatens to impose even greater costs on the New York Independent System Operator, Inc. ("NYISO") if it is applied to New York generation."

The proposed solution in the April 5<sup>th</sup> Complaint for "efficient capacity delivery procedures" (at 35–46) is based on a misunderstanding of the PJM Capacity Markets, on a misunderstanding of PJM's obligations in establishing a competitive market design, and on a misunderstanding of MISO's responsibilities in establishing its own market rules. The PJM Capacity Market can produce competitive outcomes only if all capacity can substitute for other capacity. The April 5<sup>th</sup> Complaint incorrectly assumes that PJM has obligations to address the impact of MISO generator actions on MISO markets. Even if the alleged impacts on the MISO market and on the NYISO market were correctly characterized, MISO has the ability to prevent any asserted negative impacts of pseudo ties and NYISO has never exported capacity to PJM. The April 5<sup>th</sup> Complaint does not demonstrate that the pseudo requirement is unjust, unreasonable and unduly discriminatory.

The PJM Capacity Market has produced competitive outcomes and the goal of the pseudo tie requirement is to ensure that competition continues to be effective. The Market Monitor has argued that PJM's approach to pseudo ties permits units that are not actually

substitutes for PJM capacity resources to enter the market.<sup>4</sup> Well implemented pseudo ties are essential to maintaining a competitive market.

The April 5<sup>th</sup> Complaint would substitute its view of how the PJM Capacity Market should work for the current design which resulted from 17 years of evolution, lengthy stakeholder processes and multiple Commission orders, all of which have consistently maintained the principle that capacity resources are unit specific and physical and for which individual companies have complete responsibility.<sup>5</sup> The alternative approach is not consistent with this fundamental design principle. The alternative approach simply recognizes that energy now flows between PJM and MISO on a reasonably efficient basis as a function of relative locational prices. PJM and MISO have only recently reached agreement about how to price energy at the seam more efficiently.<sup>6</sup> The April 5<sup>th</sup> Complaint would then add an obligation of the MISO RTO to ensure that capacity obligations are met by MISO units with the goal of emulating the results of pseudo ties. The April 5<sup>th</sup> Complaint misses the key point that the PJM Capacity Market is not an agreement between MISO and PJM and that it is not a vehicle for joint dispatch of units. The PJM Capacity Market is a market in which individual unit owners compete to provide capacity, with all its obligations, to PJM load. The obligations fall on individual units with all their individual limitations. When units are PJM capacity, they are PJM capacity and no longer MISO capacity. The April 5<sup>th</sup> would pretend that units do not have to make this basic choice.

PJM's pseudo tie requirement sets the standards for external capacity resources that want to export capacity to PJM. Owners of external units that want to export capacity to

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<sup>4</sup> See Comments of the Independent Market Monitor for PJM, Docket No. ER17-1138-000 (March 30, 2017) at 1–2; see also, Monitoring Analytics, LLC, 2017 *Quarterly State of the Market Report for PJM: January through March* (May 11, 2017) at 33.

<sup>5</sup> April 5<sup>th</sup> Complaint at 35–45.

<sup>6</sup> See Docket No. ER17-718-000 et al.

PJM can evaluate whether exporting capacity based on those requirements is economic. The requirements impose no obligation on MISO or NYISO to allow resources interconnected to their systems to export capacity to PJM. MISO and NYISO can address any issues related to exporting capacity to PJM in their own market rules.

If MISO determines that implementing measures necessary to permit a resource on the MISO system to export capacity to PJM in a manner required by PJM market rules creates market efficiency or reliability problems in MISO, MISO can and should modify its rules to address those impacts. Any asserted NYISO issues are purely speculative as no capacity resources have ever been exported from NYISO to PJM and will not be exported to PJM given the NYISO rules governing firm transmission rights.

The core failing of the April 5<sup>th</sup> Complaint is that it asserts an obligation of PJM market rules to address issues internal to MISO and ignores the ability of MISO to address those problems in MISO's own market rules.

The April 5<sup>th</sup> Complaint appears to want to preserve the ability of MISO generation to be paid capacity prices based on PJM's competitive capacity market, while not taking on all the obligations of being a PJM capacity resource.

#### **B. Granting the April 5<sup>th</sup> Complaint Would Harm the PJM Capacity Market.**

The PJM Capacity Market has produced competitive results and worked effectively to provide incentives for efficient entry and exit.<sup>7</sup> MISO does not have a functional capacity market. MISO relies on cost of service regulation in place of a capacity market. Cost of service regulation is a workable approach to managing the entry and exit of capacity, but it is not a market. Given these facts, the assertions in the April 5<sup>th</sup> Complaint that the rules of the PJM Capacity Market should be modified to make it easier for MISO resources to export

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<sup>7</sup> See Monitoring Analytics, LLC, 2016 State of the Market Report for PJM, Vol. 2 (March 9, 2017) at 213–214 (“2016 SOM”); Monitoring Analytics, LLC, Analysis of the 2019/2020 RPM Base Residual Auction (August 31, 2016) (“2019/2020 BRA Analysis”).

capacity to PJM are surprising and misplaced. If MISO had a functional capacity market there would not be such a strong incentive for MISO resources to attempt to export capacity to PJM.

The April 5<sup>th</sup> Complaint would replace the unit specific physical and operational requirements of PJM's Capacity Market with a slice of system energy delivery which is equivalent to eliminating the core obligations of capacity resources in the PJM market design. The proposal would fundamentally change PJM's market design. PJM's capacity market design depends on all capacity resources, regardless of technology or whether internal or external, being substitutes.<sup>8</sup> Competitive price formation in the PJM Capacity Market, as in any market, depends on all capacity resources being substitutes from an economic, operational and reliability perspective.<sup>9</sup>

The April 5<sup>th</sup> Complaint proposes to undermine the PJM market design rather than recommending that MISO and NYISO modify their own rules to address the problems it claims to have identified in those markets.

### **C. The Alleged Operational Issues Demonstrate Why a Pseudo Tie Requirement Is Needed.**

The April 5<sup>th</sup> Complaint states, incorrectly, (at 9) that "PJM has asserted that it has a very broad right to impose requirements on external generators to ensure that their capacity can be delivered reliably and efficiently." PJM has made no such assertion. PJM does not have the right, and nowhere asserts the right, to require that MISO or NYISO permit any or all generation units interconnected to their systems to export capacity. PJM does have the right and the responsibility to require that all capacity resources are substitutes and that external capacity resources are substitutes for internal capacity resources. No PJM market

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<sup>8</sup> See 2016 SOM at 230; Katz & Rosen, *Microeconomics* (1991) at 32.

<sup>9</sup> *Id.*

rule requires MISO or NYISO to approve any pseudo tie arrangement. PJM's requirement applies to the eligibility of external resources to export capacity to PJM.

The operational difficulties alleged in the April 5<sup>th</sup> Complaint (at 15–26) that arise from the pseudo tie requirement do not demonstrate that pseudo ties are not needed to ensure delivery. The alleged operational difficulties explain instead why some or most MISO resources cannot serve as substitutes for internal capacity resources. The Market Monitor agrees in principle with the assertion of the April 5<sup>th</sup> Complaint that if pseudo ties cause operational issues for MISO, MISO should not allow those pseudo ties. That is consistent with the view that external resources should be substitutes for internal capacity resources. That means, among other things, that such external capacity resources are subject to dispatch by PJM and are part of the ACE of PJM and not MISO. If external resources cannot reasonably be full substitutes for internal resources it is better for MISO and better for the PJM markets that the capacity not be imported into PJM. That is the appropriate solution to the identified issues. Undermining the core principles of the PJM Capacity Market in order to avoid the real substantive issues that exist with capacity imports is not an appropriate solution.

A capacity commitment to PJM includes an associated and continuing obligation to participate in the PJM markets. The daily must offer requirement in the PJM energy markets is part of that obligation.<sup>10</sup> Taking on the obligation requires an operational relationship sufficient to support a resource's participation in PJM markets. If MISO or NYISO cannot accommodate pseudo ties transferring operational control of a resource or group of resources exporting capacity to PJM, then MISO or NYISO cannot accommodate such resources meeting their obligations to PJM as external capacity resources. The pseudo tie requirement is defined to assure that a resource meets its deliverability obligations.

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<sup>10</sup> The FRR Alternative which exists alongside the RPM auctions also demonstrates this, as FRR attempts to match an identified group of resources to serve an identified load.

Granting the relief sought by the April 5<sup>th</sup> Complaint would mean that resources not capable of efficiently and reliably participating in PJM markets would nevertheless be permitted to do so. Such inferior resources would displace capacity resources that are capable of meeting all obligations.

The April 5<sup>th</sup> Complaint argues: “MISO’s and PJM’s compliance with the RTO requirements of Order No. 2000 was expressly conditioned upon them working together to eliminate seams and administer well-functioning markets.”<sup>11</sup> Rules protecting an efficient competitive capacity market in PJM are essential to maintaining an efficient seam. The rules of the seam must recognize that MISO does not have a capacity market. A key obstacle to further progress meeting the aspirations of Order No. 2000 is MISO’s continued reliance of the recovery of investment through traditional cost of service regulation and its failure to adopt a competitive capacity market. The April 5<sup>th</sup> Complaint is not about reducing seams between RTOs or otherwise realizing Order No. 2000’s goals.

But MISO’s and PJM’s different understanding of what constitutes a “well-functioning market” poses the most significant barrier to the creation of a seamless common market, not PJM’s need for a pseudo tie requirement to ensure reasonably comparable deliverability standards for all capacity resources.

The MISO design does not include a functional capacity market. MISO instead relies on cost of service regulation to sustain investment. PJM is a complete market which is designed to create internal incentives that will result in competitive entry and exit consistent with a defined reserve margin. As long as this major difference in design and objectives exists, the nature of capacity defined in MISO and PJM will be materially different and capacity will not be fungible. PJM will need rules, such as the pseudo tie rule, that ensure the viability of competitive investment in PJM to maintain reliability in PJM. An

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<sup>11</sup> April 5<sup>th</sup> Complaint at 10, citing *Northern Indiana Public Service Company v. Midcontinent Independent System Operator, Inc., et al.*, 155 FERC ¶ 61,058 at PP 141–43 (2016).

effective pseudo tie requirement is a necessary but not sufficient condition for maintaining an effective seam between the cost of service regime in MISO and capacity markets in PJM.

The argument that the pseudo tie requirement unfairly impacts neighboring markets and systems is misplaced. MISO and NYISO can accept, conditionally accept or reject pseudo ties under their own rules. The sole purpose of the pseudo tie requirement is to protect the PJM market and market design.

#### **D. The Pseudo Tie Requirement Promotes Efficient Markets in PJM.**

The April 5<sup>th</sup> Complaint states (at 14): “Absent interregional capacity transactions, an RTO can set inflated capacity prices to motivate investment in new resources. Such prices would not be based on the interplay of competitive market forces and thus would be unjust and unreasonable, if the RTO could satisfy its planning requirements by importing capacity at a much lower cost.”

The April 5<sup>th</sup> Complaint misunderstands the PJM Capacity Market. PJM does not set prices. PJM creates a market design with Commission approved rules which results in competitive outcomes and meets PJM’s reliability requirements. It is not competitive to permit resources with lower obligations to compete with resources with full obligations. Permitting inferior resources to participate in PJM capacity markets suppresses prices, is not consistent with competition and undermines reliability.<sup>12</sup> The recommendations of the April 5<sup>th</sup> Complaint would result in noncompetitive price suppression rather than in competitive price formation. Capacity imports without pseudo tie requirements have led to inefficient price suppression in the PJM Capacity Market.<sup>13</sup>

The April 5<sup>th</sup> Complaint attempts to quantify (at 14–15) the price impact of limiting capacity imports. The Market Monitor routinely performs an analysis of the impact of

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<sup>12</sup> {BRA REPORTS}

<sup>13</sup> See Monitoring Analytics, LLC, Analysis of the 2017/2018 RPM Base Residual Auction (October 6, 2014) at Table 23.

imports on prices in the PJM Capacity Market.<sup>14</sup> It is correct that, if everything else were held constant and relatively low price imports were removed, prices would increase. That is a measure of the price suppressive impact of competition from inferior resources. In fact, prices would increase in PJM, investors in PJM capacity would respond and PJM capacity prices, whatever the final level, would be consistent with a competitive outcome. That is a good outcome, consistent with competitive markets. The alternative would be to permit inferior capacity imports which would suppress the PJM price and result in uneconomic retirements in PJM, or requests for subsidies, as well as a lack of economic new entry. The PJM market would be dependent on external resources without a long term commitment to PJM which could be withdrawn at any time with resulting price impacts on PJM customers.

The April 5<sup>th</sup> Complaint argues (at 15) that PJM's pseudo tie requirements "would severely limit new and existing pseudo-ties and ... lead to inefficient inflation of prices and costs in the PJM capacity market... [T]hese proposed restrictions unduly discriminate against external resources." This argument has it backwards. Failing to enforce the same standards for external capacity that apply to internal capacity unduly discriminates against internal resources, leads to inefficient price suppression and noncompetitive outcomes in the PJM capacity markets.

The argument that the pseudo tie requirement would lead to inefficient capacity prices in PJM has no merit and should be rejected.<sup>15</sup>

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<sup>14</sup> See Monitoring Analytics, Analysis of the 2019/2020 RPM Base Residual Auction (August 31, 2016) at Table 33.

<sup>15</sup> This response has focused on the fundamental weaknesses of the April 5<sup>th</sup> Complaint. The Market Monitor does not agree that the analysis of purported dispatch inefficiency is correct, but will not address the details here because they are not relevant, for the reasons specified in this filing.

## 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,

A blue ink signature of "Jeffrey W. Mayes" is written in a cursive, flowing style.

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Dated: May 31, 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 31<sup>st</sup> day of May, 2017.



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