BEFORE THE FEDERAL ENERGY
REGULATORY COMMISSION

PJM Interconnection, L.L.C.	**)**	**Docket No. ER16-76**

MOTION FOR LEAVE TO ANSWER AND ANSWER OF THE PENNSYLVANIA PUBLIC UTILITY COMMISSION IN SUPPORT OF COMMENTS OF THE INDEPENDENT MARKET MONITOR

Pursuant to Rules 212 and 213 of the Commission's Rules of Practice and Procedure, 18 C.F. R. §§ 385.212, 385.213, the Pennsylvania Public Utility Commission (PAPUC) submits its Motion for Leave to Answer[1] and Answer in Support of Comments filed by the Independent Market Monitor (IMM) to a filing by PJM Interconnection, L.L.C. (PJM) on October 14, 2015 proposing certain revisions to Appendix K-Appendix of the PJM Open Access Transmission Tariff (Tariff) and Schedule 1 of the PJM Amended and Restated Operating Agreement (Operating Agreement).

I. INTRODUCTION

On October 14, 2015, PJM Interconnection, L.L.C. ("PJM"), filed proposed revisions to its Attachment K of its Tariff and related provisions of Schedule 1 of the Operating Agreement, to modify various offer cap and price formation provisions in advance of the 2015-2016 winter period.[2] In its filing, PJM proposes as follows:

[1] The Commission's procedural rules do not provide for answers to comments as a matter of right. However, the Commission regularly allows answers where the answer provides further explanation or otherwise helps ensure a full and complete record. See, e.g., *PJM Interconnection, L.L.C.,* 104 FERC ¶ 61,154, at P 14 (2003), on reh'g, 109 FERC ¶ 61,236 (2004); *Williams Energy Mktg. & Trading Co. v. Southern Co. Servs., Inc*., 104 FERC ¶ 61,141, at P 10 (2003); *Ameren Services Co*., 100 FERC ¶ 61,135, at P 15 (2002), on reh'g, 103 FERC ¶ 61,178
[2] Re: PJM Interconnection, L.L.C., Docket No. ER16-76 (filed October 14, 2015).

(i) Market Sellers of generation resources may submit cost-based offers for incremental energy at amounts consistent with PJM's Cost Development Guidelines and applicable fuel cost policy, with those offer amounts used for determining merit order dispatch.[3] PJM states those offers will be allowed to set Locational Marginal Prices (LMPs) only up to $2,000/MWh. PJM claims that the $2,000/MWh cap satisfies the request of load interests for an upper bound on the offer amount that will be allowed to set LMPs. PJM concedes that a $2,000/MWh energy offer cap exceeds levels experienced in the past.

(ii) PJM proposes to allow Market Sellers of generation resources with demonstrated costs above $2,000/MWh, calculated in accordance with the Cost Development Guidelines and applicable fuel cost policy, to recover those costs through make-whole payments. Eligibility for any such cost recovery shall be subject to an after-the-fact review by PJM and the IMM.

(iii) If a Market Seller submits a cost-based offer above $1,000/MWh and less than or equal to $2,000/MWh for a particular generation resource, PJM proposes to allow the Market Seller to submit a market-based offer for that resource that is less than or equal to the cost-based offer.[4] Further, if a Market Seller submits a cost-based offer above $2,000/MWh for a particular generation resource, then the market-based offer for that resource must be less than or equal to $2,000/MWh.[5]

[3] PJM Interconnection, L.L.C. at 4-5. PJM previously implemented emergency measures in advance of the 2014-2015 winter to waive or modify certain offer cap and price formation provisions of the Tariff. *See* PJM Interconnection, L.L.C., Docket No. EL15-31-000 (filed December 15, 2014); *PJM Interconnection, L.L.C.*, 150 FERC ¶61,020 (2015) ("January 2015 Order") (approving PJM's request for temporary increase in the energy offer cap for 2014-2015 winter). PJM states in the instant filing that its request to reset the energy offer cap at $2,000/MWh is a change from a December 2014 Filing which capped all offer amounts at $1,800/MWh. Here, PJM proposes to allow cost-based offers above $2,000/MWh for the purpose of determining merit order dispatch, but not for calculating LMPs. PJM states that this revision will enable PJM to differentiate, for dispatch purposes, between multiple Market Sellers of generation resources that incur costs greater than $2,000/MWh, which will improve operational efficiency.

[4] *Id.* at 5. Cost-based offers are based on short-run marginal costs of the applicable generation resource as explained in Schedule 2 of the Operating Agreement and PJM Manual 15 ("Cost Development Guidelines"). A market-based offer is submitted by the Market Seller based on its view of costs, operating risks, market forces or any other factors that may contribute to its expectation of market conditions.

[5] *Id.* at 5. This proposed revision accounts for the fact that when Market Sellers submit their cost- based and market-based offers, PJM's systems automatically select the lower of the two offers. If a Market Seller's market-based offer were not allowed to rise along with a cost-based offer that exceeds $1,000/MWh, PJM's systems would automatically select the lower, market-based offer, which would still be capped at $1,000/MWh.

(iv) PJM is not proposing a specific sunset for the revisions proposed in its filing as it did for the temporary revisions implemented prior to the winter of 2014-2015. PJM states that it expects these revisions to be in effect until the FERC issues a rule to modify or supersede these revisions.

(v) PJM is proposing to report to the Commission any offers in excess of the $1,000/MWh cap. PJM proposes to provide annual, post-winter reports until such time that an upcoming Commission rule modifies or supersedes the revisions proposed herein.[6]

PJM states in its filing that the requested modifications are necessary in order to properly balance the interests of Market Sellers and Market Load as well as to avoid potential offer cap issues associated with energy uplift charges and unrecoverable generation costs. Further, these proposed revisions are based on a two-thirds (2/3) consensus of stakeholders on offer cap issues resulting from a series of meetings conducted during 2015. PJM states that this filing is the product of a compromise stakeholder consensus endorsed by the PJM Markets and Reliability Committee (MRC) on October 1, 2015.[7] PJM's filing explains all of the proposed revisions to Attachment K-Appendix of the Tariff.[8]

PJM further states that it is not proposing any changes to shortage pricing provisions but that "a consequence of the proposed revisions may be that shortage prices

[6] *Id.* at 5. As a point of reference, PJM notes that, as a result of its December 2014 filing, only 25 units submitted offers greater than $1,000/MWh. Of these 25 units, only four operated during periods when these offers were active and none of these offers directly affected energy prices or resulted in any make-whole payments.

[7] *Id.* at 5.

[8] Relevant changes are to Section 6.4.1 Applicability (a), (e) (to reflect the new $2,000/MWh cap for calculating LMPs); Section 1.10.1A (d) (viii) Day-ahead Energy Market Scheduling (to permit Market Sellers to submit offers in excess of $1,000/MWh; Section 3.2.3 (m), (n) and (r) Operating Reserves (modification of eligibility for Operating Reserve Credits as part of the make-whole process); Section 2.2 General (increase energy offer cap to $2,000/MWh for calculating LMPs); and Section 2.4 (b), (c) Determination of Energy Offers Used in Calculating Real-Time Prices (to reflect increase in energy offer cap to $2,000/ MWh).

increase because shortage prices are determined based on the offer price plus the Primary Reserve Penalty Factor."[9] PJM then reasons that raising the energy offer cap results in limits on the two Reserve Penalty Factors (RPFs) which would not accurately reflect the value of those reserves during shortage conditions.[10] PJM concludes that it is not seeking to increase the RPFs in this filing but will await the outcome of a future FERC proceeding addressing shortage pricing.[11]

On November 4, 2015, the Independent Market Monitor (IMM) filed Comments in this proceeding that objected to PJM's filing as implicitly requesting an increase in the maximum scarcity pricing level currently set at $2,700/MWh to $3,700/MWh. The IMM requested additional changes including an approved fuel policy and clarification of the IMM's role in reviewing requests for Operating Reserve Credits.

II. SUMMARY OF PAPUC POSITION

The PAPUC does not oppose the consensus framework achieved by the stakeholders regarding the energy offer cap issue that was subsequently approved by the MRC insofar as it permits cost-based offers to be reflected in the LMP if such costs are less than or equal to $2,000/MWh.[12] The PAPUC also does not object to other proposed Tariff revisions associated

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[9] *Id.* at 15.
[10] PJM's Tariff allows for application of Reserve Penalty Factors to specific reserve products such as Primary and Synchronized Reserves when such products fall below required levels during scarcity periods.
[11] *See, e.g., Settlement Intervals and Shortage Pricing in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Notice of Proposed Rulemaking, Docket No. RM15-24-000 (September 17, 2015) ("NOPR") at 7 ("The action the Commission takes herein is the first step to advancing the goals of the Commission's price formation proceeding. The Commission expects to undertake further action addressing various price formation topics, including offer price caps, mitigation, uplift transparency, and uplift drivers.").
[12] The PAPUC intervened on November 6, 2015.

with increasing the energy offer cap. On that basis, the PAPUC did not file any initial pleadings in this proceeding. However, the IMM's Comments on November 4, 2015 raised certain concerns about the potential impact of the proposed increase in the energy offer cap on existing scarcity pricing provisions. After further review and discussion with both the IMM and PJM, the PAPUC files this Answer in support of the IMM's Comments as follows:

(i) The PAPUC supports the IMM Comments which interpret PJM's energy offer cap filing as having the potential to increase the Maximum Scarcity Price level from $2,700/MWh to $3,700/MWh under certain conditions.

(ii) The PAPUC additionally agrees with the IMM that any increase to Maximum Scarcity Price was not the subject of the stakeholder process and such an increase is not explicitly addressed in the filed Tariff language. On that basis, the FERC should not approve any increase to the maximum scarcity price beyond the current level of $2,700/MWh.

(iii) The PAPUC supports the IMM's request for an approved fuel policy as a requirement for submission of cost-based offers above $1,000/MWh.

(iv) The PAPUC supports the IMM's request for clarification of its role in the review of costs and documentation for receiving Operating Reserve Credits.

III. ANSWER

A. The PAPUC Supports The IMM Comments Which Interpret PJM's Energy Offer Cap Filing As Having The Potential To Increase The Maximum Scarcity Price Level From $2700/MWh To $3700/MWh Under Certain Conditions.

The PAPUC does not oppose PJM's proposal to allow market-based bids equal to or less than cost-based bids to set LMP up to $2,000/MWh, as it represents the compromise achieved through the stakeholder process to address higher fuel costs that may occur in the 2015-2016 winter. However, the IMM has correctly highlighted that approval of PJM's filing, without modification, will result in an increase in the Maximum Scarcity Price ("MSP") during certain limited conditions. In its filing, PJM states as follows:

Finally, PJM notes that it is not proposing any changes to its shortage pricing provisions herein. However, a consequence of the proposed revisions may be that shortage prices increase because shortage prices are determined based on the offer price plus the Primary Reserve Penalty Factor plus the Synchronized Reserve Penalty Factor. Today, the shortage price cannot exceed $2,700/MWh because the offer price is capped at $1,000/MWh and the two Reserve Penalty Factors are $850/MWh each. Under PJM's current proposal, because offer prices will be permitted to exceed $1,000/MWh, it follows that shortage prices could exceed $2,700/MWh. PJM believes this is a reasonable outcome because the basis of the shortage price is still the offer price at which the resource clears the energy market, which is the same rule that applies today. Further, this approach is consistent with what was proposed by PJM, and accepted by the Commission in the December 2014 Filing.

Limiting the level to which shortage prices could rise to the current $2,700/MWh would undermine the purpose of raising the energy market offer cap. If a Market Seller were to submit cost-based offers that approach $2,000/MWh and PJM experiences an actual shortage of reserves, then limiting the shortage price to only $2,700/MWh would effectively mean that the combination of the two Reserve Penalty Factors would be limited to $700/MWh as opposed to the current $1,700/MWh. Limiting the level of the Reserve Penalty Factors in this manner would not reflect the value of those reserves during shortage conditions. In fact, it is PJM's position that if any long term solution increases the energy offer cap above $1,000/MWh, the Reserve Penalty Factors should also increase because the likely opportunity cost for resources with offers below $1,000/MWh would be much larger than the $850/MWh amount that underpinned the establishment of the current Reserve Penalty Factors with the $1,000/MWh energy offer cap.[13]

PJM's language above concedes that increasing the energy offer cap, while not increasing the applicable RPFs (currently set at $850/MWh) could, under certain conditions, result in an increase in the MSP from $2,700/MWh to $3,700/MWh.[14] The PAPUC's interpretation of PJM's proposed language has been confirmed with PJM and is consistent with the IMM's position. The PAPUC is concerned about PJM's proposal because it believed the relevant stakeholder discussions did not encompass any proposal to increase the MSP nor was this subject part of the compromise framework approved by the MRC in October 2015. Accordingly, the PAPUC supports the IMM's conclusion that an increase in scarcity prices does not necessarily

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[13] *Id.* at 15-16.

[14] During scarcity conditions, energy prices could reach the $2,000/MWh offer cap with additional RPFs for both primary and synchronized products of $850/Mwh ($1,700/MWh total RPF) for a total MSP of $3,700/MWh.

result from the agreement reached through a stakeholder process where the subject was not specifically addressed.[15]

The PAPUC's concern is not limited to its procedural objection. An increase in the MSP has real and substantial cost consequences for retail customers in Pennsylvania in the event of another polar vortex event of January 2014 or hot weather events that result in generation outages and reserve shortages. Additionally, transmission outages, which could be sustained for significant lengths of time, that are unrelated to generator performance incentives, could result in sustained scarcity conditions where the $3,700/MWh MSP level is reached and could set LMP for extended time periods.

The PAPUC notes that FERC has established a rulemaking regarding settlement intervals and shortage pricing in markets operated by regional transmission organizations and independent system operators, a fact that PJM acknowledged in its filing .[16] In that rulemaking, FERC recognized that some RTOs/ISOs currently restrict the triggering of shortage pricing to shortages due only to certain causes.[17] The PAPUC has serious concerns over the potential for shortage pricing to establish sustained high clearing prices resulting from shortage conditions caused by transmission facility outages that are not responsive to market prices. The PAPUC suggests that, if the issue of resetting the MSP is returned to the stakeholder group for resolution, the following matters be addressed: (i) potential adjustment of the penalty factors; (ii) addressing whether scarcity pricing above $2,700/MWh should be permitted to set LMP; and (iii) should scarcity pricing be applicable to shortage conditions caused by transmission outages. For the

[15] IMM Comments at 5-6.
[16] *See Settlement Intervals and Shortage Pricing in Markets Operated by Regional Transmission Organizations and Independent System Operators*, Notice of Proposed Rulemaking, Docket No. RM15-24-000 (September 17, 2015).
[17] *Id.* at 30.

reasons stated above, the PAPUC supports the IMM's request to maintain the current limits on scarcity pricing until the issue is addressed in the PJM stakeholder process.

B. The PAPUC Supports The IMM's Request For An Approved Fuel Policy As A Requirement For Submission Of Cost-Based Offers Above $1,000/MWh.

The PAPUC supports the IMM's request that an approved fuel policy be required of market participants for eligibility to submit cost-based offers.[18] PJM's proposed language only requires that a market participant submitting cost-based offer above $1,000/MWh include an *applicable fuel policy* which is not sufficient. PJM's proposed tariff language is silent on the requirement for any type of approved fuel policy. The IMM asserts that the requirement of an approved fuel cost policy is critical for the IMM to effectively monitor participant behavior particularly when fuel costs are at elevated levels.

The PAPUC supports the IMM's modest tariff modification which will not impose any undue burdens on market participants and provide greater market transparency where a market participant is seeking cost recovery for higher than expected fuel costs.

C. The PAPUC Supports The IMM's Request For Clarification Of Its Role In The Review Of Costs And Documentation For Receiving Operating Reserve Credits.

The PAPUC supports the IMM's proposed revisions to PJM's Tariff language at Section 3.2.3 (r) of the Operating Agreement relating to receipt of credits for Operating Reserves.[19] The IMM's very minor revisions clarify that it is the role of the IMM to review requests to receive credit for Operating Reserves specifically for market power concerns while it is the role of PJM's Office of Interconnection to review these requests specifically for tariff compliance.

[18] IMM Comments at 6-7.
[19] *Id.* at 7-10.

The IMM's requested modification is reasonable and will avoid any potential confusion over the roles of the two entities in reviewing requests for Operating Reserve Credits.

IV. CONCLUSION

For all the foregoing reasons, the Pennsylvania Public Utility Commission respectfully requests that its Answer in this proceeding be considered by FERC in its deliberations on PJM's Tariff filing at this docket.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I am on this date serving a copy of the foregoing document upon each person designated on the official service list compiled by the Federal Energy Regulatory Commission in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure.

Dated at Harrisburg, PA this 19th day of November, 2015.

Respectfully submitted,

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