

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

PJM Interconnection, L.L.C.

)  
)  
)

Docket No. ER19-383-000

**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,<sup>1</sup> Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor (“Market Monitor”) for PJM Interconnection, L.L.C. (“PJM”),<sup>2</sup> submits this answer and motion for leave to answer the answer filed in this proceeding by PJM on December 26, 2018 (“December 26<sup>th</sup> Answer”). The December 26<sup>th</sup> Answer incorrectly claims that the issues raised in the Market Monitor’s comments are beyond the scope of the proceeding. The issues and solution presented by the Market Monitor frame the design flaw issue at that core of this proceeding in the only way that makes any sense. Action necessary to ensure just and reasonable rates for regulation service should be taken in this proceeding. PJM has identified an important market design flaw. However, there is no support for how PJM has framed the issue or its proposed resolution. If it is determined that an appropriate resolution to the issue in this proceeding cannot be devised exclusively under Section 205 of the Federal Power Act, then Section 206 should be relied upon.

---

<sup>1</sup> 18 CFR §§ 385.212 & 385.213 (2018).

<sup>2</sup> 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. COMMENTS

PJM argues (at 2) that “[t]he IMM Comments include critiques of broad structural issues associated with PJM’s regulation market” which are “wholly outside the scope of PJM’s November 20 Filing.” PJM states (at 2–3) that its November 20<sup>th</sup> filing has specifically limited the proceeding “to the narrowly tailored proposal...intended to address a unique occurrence that has recently been observed in the PJM Regulation market.” PJM claims (at 3) that “any other considerations, such as broader reforms to the PJM Regulation market, are beyond the scope of this filing.”

The true scope of this proceeding is broader than PJM asserts here. The issue addressed in the December 26<sup>th</sup> Filing is neither a unique occurrence nor a recent development. The core issue of this proceeding results from a longstanding and unaddressed market design flaw. PJM’s unduly narrow conception of the scope comes from its incorrect presentation of the issue and the proposed solution is a band aid that fails to address the issue. PJM knows and understands the real issue, as its filing in Docket No. ER18-87 makes plain.<sup>3</sup>

The December 26<sup>th</sup> Filing identifies the issue to be recently “observed intervals in the Regulation market where a resource with a very low marginal benefit factor (MBF) (less than 0.1) cleared hour-ahead because it had a \$0 Total Adjusted Offer, but in real-time the adjusted LOC was non-zero, and as a result, the resource set the clearing price and the RMCPs were significantly elevated.” PJM identifies (at 6) occasional “very large clearing prices” as a problem, but does not explain why they are problematic. PJM does not explain why the observed high prices are unjust and unreasonable and why the observed prices do not reflect the price of the marginal resource. PJM does not explain why the resulting prices are incorrect or inconsistent with a competitive outcome.

---

<sup>3</sup> Request for Rehearing of PJM Interconnection, L.L.C., ER18-87-001 (April 30, 2018) (still pending).

Because the December 26<sup>th</sup> Filing does not properly define and demonstrate the alleged problem, the proposed solution is misdirected and unsupported. PJM's proposal to cap the amount of RegD that clears the market does not address the source of the problem. PJM's proposal is a band aid because it will reduce somewhat, but not eliminate, the inefficiently and uncompetitively high prices caused by a combination of a very low MBF in market clearing and paying RegD based on an MBF equal to 1.0. PJM's proposal does not address or identify the underlying market design flaw that will be resolved by its proposal. PJM's proposal will not produce just and reasonable prices. PJM's proposal will continue to allow arbitrary prices, although the prices will be less high than currently.

The Market Monitor's proposal, as explained in its December comments, is squarely within the scope of the proceeding because it is the only proposal that directly identifies and addresses the market design flaw that is the root cause of the observed price spikes, and provides a solution to this market design flaw that will address the prices spikes that are symptoms of that market design flaw. The flaw is the inconsistent application of the MBF in PJM's regulation market design. The high prices identified by PJM are merely a symptom of the problem, not the problem itself.

In a properly functioning market every resource should be paid the same price per unit produced. The PJM Regulation Market fails this basic test. RegA and RegD resources are not paid the same price in dollars per effective MW. RegD resources are being paid more than the market clearing price. The price spikes in PJM's Regulation Market are a direct result.

Although the issue appears complex, it is actually simple. If all MW of regulation were treated the same in the clearing of the market and in paying the cleared MW, there would be no price spikes. The current PJM rules require the payment to RegD resources of up to 1,000 times the correct price! That is the simple problem. The solution is also simple.

Under the current market design, PJM buys, on behalf of PJM customers, the correct amount of RegD, but pays RegD as if the MBF were 1.0. In the extreme case cited by PJM,

when the MBF is .001, RegD are paid 1,000 times too much. If the market clearing price is \$1.00 per MW of RegA, Reg D is paid \$1,000 per effective MW!

The solution is to pay RegD for the same effective MW it clears in the regulation market. In this example, RegD would be paid \$.001, which is  $\$1.00 * .001$  MW.

The PJM proposal will not eliminate the observed price spikes and it will not eliminate the cause of the price spikes because it will not eliminate overpayment of RegD when the MBF is less than 1.0. PJM's proposal does not correct the problem caused by the current market design. PJM's proposal to cap RegD MW at the point where the lowest MBF will be 0.1 rather than .001 would merely reduce the magnitude of the price spikes observed in the PJM Regulation Market but will not eliminate price spikes. PJM's proposal will not decrease the likelihood of inefficient and noncompetitive outcomes for market participants. The current regulation market design causes inefficient and noncompetitive outcomes in every hour when RegD clears the market and the MBF is less than 1.0. Correspondingly, RegD is underpaid when the MBF is greater than 1.0.

In addition, this market design flaw creates an opportunity and an incentive for participants to manipulate the market results by bidding noncompetitively. The overpayment of RegD resources, when the MBF is less than 1.0, creates a perverse incentive for RegD resources to bid zero in order to guarantee that they clear the market and benefit from possible price spikes caused by RegD resources with a non-zero LOC within an hour. This incentive extends to those RegD resources, such as hydro or CTs, that have energy offers that can generate a within hour LOC component for their price offer and cause price spikes well in excess of their offers.

Under PJM's current regulation market rules, whenever the MBF is less than 1.0, RegD resources are paid significantly in excess of their market value and regulation customers are overcharged for regulation service. PJM's proposal to cap RegD MW at the point where the MBF is 0.1 will reduce, but not eliminate, the size of the overpayment to RegD resources. PJM's proposal to cap RegD MW at the point where the MBF is 0.1 will reduce, but not eliminate, the perverse incentives for RegD resources to bid below cost to

force low MBF and the potential for price spikes. PJM's proposal to cap RegD MW at the point where the MBF is 0.1 will reduce, but not eliminate, the market inefficiencies caused by PJM current market design. PJM's proposal would also operate to cap prices established under a corrected market design. PJM's proposal would create incorrect market incentives and introduce inefficiencies into pricing under a corrected market design. The problem is not that prices are too high; the solution is not an arbitrary price cap.

The only way to actually solve the identified issues with PJM's Regulation Market would require a consistent application of the MBF and not a cap on the MBF.

## 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.<sup>4</sup> In this answer, the Market Monitor provides the 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.

---

<sup>4</sup> 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 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,



---

Jeffrey W. Mayes

General Counsel  
Monitoring Analytics, LLC  
2621 Van Buren Avenue, Suite 160  
Eagleville, Pennsylvania 19403  
(610) 271-8053  
*jeffrey.mayes@monitoringanalytics.com*

Joseph E. Bowring  
Independent Market Monitor for PJM  
President  
Monitoring Analytics, LLC  
2621 Van Buren Avenue, Suite 160  
Eagleville, Pennsylvania 19403  
(610) 271-8051  
*joseph.bowring@monitoringanalytics.com*

Howard J. Haas  
Chief Economist  
Monitoring Analytics, LLC  
2621 Van Buren Avenue, Suite 160  
Eagleville, Pennsylvania 19403  
(610) 271-8054  
*howard.haas@monitoringanalytics.com*

Dated: January 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 10<sup>th</sup> day of January, 2019.



---

Jeffrey W. Mayes

General Counsel

Monitoring Analytics, LLC

2621 Van Buren Avenue, Suite 160

Eagleville, Pennsylvania 19403

(610) 271-8053

*jeffrey.mayes@monitoringanalytics.com*