# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

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| PJM Interconnection, L.L.C. | ) | Docket No. ER24-1387-000 |
|                             | ) |                          |

## 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 to the answer filed by PJM on April 8, 2024 ("PJM Answer"), to the protest filed by the Market Monitor on March 22, 2024 ("Protest") to PJM's March 1st filing. The PJM Answer does not address the fundamental problems with PJM's March 1st filing. The March 1st Filing is not supported as just and reasonable and should be rejected because it is not only inconsistent with a competitive market, it directly undermines the competitive market and enables the exercise of market power. PJM's approach is not one of multiple just and reasonable approaches to the computation problem identified by PJM. PJM's March 1st filing is not just and reasonable by any standard.

<sup>&</sup>lt;sup>1</sup> 18 CFR §§ 385.212 & 385.213 (2023).

<sup>&</sup>lt;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. ANSWER

#### A. PJM's Answer is Misleading and Incorrect.

The PJM Answer (at 1) describes the March 1<sup>st</sup> Filing as both narrow and necessary. It is neither. The fact that the March 1<sup>st</sup> Filing chose to state the proposal in few words does not mean that the change is narrow.

The PJM Answer (at 6) asserts that its approach to market power mitigation is required in order to adopt better combined cycle modeling (nGEM). The PJM Answer is incorrect. There is no tradeoff between nGEM and effective market power mitigation.

The PJM Answer (at 3-4) asserts that its proposal does not undercut market power mitigation in the PJM energy market. The PJM Answer is incorrect.

The PJM Answer (at 12) asserts that the November 30<sup>th</sup> Order related to the real-time energy market is determinative in this matter. The PJM Answer is incorrect.

#### B. nGEM Does Not Require PJM's Approach.

It is simply not true that nGEM requires PJM's approach. The rationale advanced by PJM for a change was simply that PJM thought it necessary to have the schedule selection process occur prior to running the market software. In the stakeholder process, PJM did not argue that their approach was the only solution. In fact, PJM supported a proposal in the stakeholder process that selected the cost-based offer whenever structural market power exists and that was nearly identical to the Market Monitor/GT Power Group proposal.

The PJM Answer presents the March 1<sup>st</sup> Filing as a tradeoff (at 6-8), as if the nGEM project will end unless the Commission approves the March 1<sup>st</sup> Filing. This is not accurate. There is no tradeoff between nGEM and the March 1<sup>st</sup> Filing. The nGEM project does not make the March 1<sup>st</sup> Filing just and reasonable.

#### C. PJM's Approach Would Undo Market Power Mitigation in the Energy Market.

PJM's current approach to market power mitigation in the day-ahead energy market chooses the offer schedule with the lowest costs based on the expected dispatch of the unit over the entire day. The competitive conditions of the market affect the schedule selection choice. Factors unknown to the market seller, like the offers of competitors, play a role in the

outcome. Under the March 1<sup>st</sup> Filing, only the offers of the market seller determine the outcome, so the outcome is fully knowable in advance and offers can be structured to enable the exercise of market power. It is evident that this process will not result in the lowest cost.

The PJM Answer (at 10) claims that the March 1st Filing "maintains the tariff's existing approach of mitigating to the least-cost schedule." This is simply not the case. The March 1st Filing changes the day-ahead market schedule selection from an optimized choice that selects the schedule that results in the lowest overall system production costs, to a simple formula that ignores most of the energy offer curve and most of the operating parameters. It does not even evaluate all 24 hourly offers of the day. The March 1st proposed process cannot result in the lowest cost if it ignores so many parts of the offer.

The approach in the March 1st Filing would select the schedule with the lower cost at the economic minimum point and, as a result, ignore the offer above that point. The result would permit the exercise of market power through significant markups when units are dispatched above the economic minimum point and the price schedule is greater than the cost schedule above the economic minimum. PJM's proposed schedule selection will not ensure the selection of the lower of cost or price schedules.

PJM's description of its proposed approach as based on the "lowest total dispatch cost" is incorrect. PJM's approach selects the offer with the lower cost only at the economic minimum point and only for a select set of hours. It is a dispatch cost in name only. It does not consider the expected run hours or the actual expected market dispatch. Given that the selection occurs prior to the market clearing for the day, it is not possible for PJM's proposed schedule selection to evaluate or select the lowest total system dispatch cost.

The only way to ensure that the exercise of market power is prevented is to select the cost-based offer when structural, locational market power is identified.

#### D. PJM's Choice of Offers by Hour is Illogical.

Based on the March 1<sup>st</sup> Filing, PJM proposes to add up the cost and price-based offers at economic minimum for the highest cost hourly offers for the minimum run time hours on each schedule. Offers within a schedule can vary by hour. (A common reason for such

variation is that the gas-based offer through 10:00 AM is based on one gas day and the gas-based offer after 10:00 AM is based on the next gas day.) PJM states: "Total hourly dispatch cost will use the highest hourly cost for equivalent hours as minimum run time." PJM never explains why it makes sense to use the highest hourly costs when it is supposed to be minimizing costs. The hours are spread across the day and are not contiguous and therefore do not represent a minimum run time. PJM then proposes to take the lower of the sum of the highest hourly costs for the number of hours equal to the minimum run time.

This is breathtakingly convoluted, does not follow any apparent logic and was never explained in detail by PJM in the March 1st Filing or the PJM Answer.

The PJM Answer claims (at 4, 6) that the March 1st Filing aligns the day-ahead and real-time schedule selection, but it does not. The real-time market schedule selection process evaluates the relevant hours of commitment for a resource, using the submitted hourly offers applicable to the hours when the resource is expected to operate. The proposed choice of hours for evaluation under the March 1st Filing has no connection to hours when the resource is expected to clear the market.

For example, the Market Monitor used the spreadsheet, developed by PJM to demonstrate the schedule selection under the March 1st Filing, to compare offers for a dual fuel unit. The comparison is for a day when the relative prices of gas and oil change midday, with the gas offer lower than the oil offer in the morning and the extremely high gas offer higher than the oil offer in the afternoon. <sup>4</sup> The example shows that PJM would evaluate the gas offer based on the highest hourly gas offer prices of the day (the afternoon high gas offer)

For a detailed example, see Monitoring Analytics, L.L.C., "Schedule Selection IMM Package," Market Monitor presentation to the Market Implementation Committee (August 9, 2023), <a href="https://www.monitoringanalytics.com/reports/Presentations/2023/IMM MIC Schedule Selection IMM Proposal 20230809.pdf">https://www.monitoringanalytics.com/reports/Presentations/2023/IMM MIC Schedule Selection IMM Proposal 20230809.pdf</a>.

PJM. Presentation to the MIC, "Performance Impact of Multi-Schedule Model on Market Clearing Engine (MCE)," (August 9, 2023). <a href="https://www.pjm.com/-/media/committees-groups/committees/mic/2023/20230809/20230809-item-05b---performance-impact-of-multi-schedule-model-on-market-clearing-engine---packages.ashx">https://www.pjm.com/-/media/committees-groups/committees/mic/2023/20230809/20230809-item-05b---performance-impact-of-multi-schedule-model-on-market-clearing-engine---packages.ashx</a>>.

and, as a result, would select the oil offer for the entire day, even though the gas offer is lower for the morning. Under PJM's proposal, the day-ahead market would no longer have the option to commit the unit on the gas schedule even if taking the unit on the lower gas offer in the morning was the economic choice for the system. This example illustrates the general conclusion that the March 1st Filing results in suboptimal outcomes that are clearly not cost minimizing, not efficient, and not how a market seller would expect PJM to commit and dispatch their resources.

### E. The Alternative Is Not Extreme and Does Not Remove the Ability to Submit Offers.

The proposal made by the Market Monitor in the stakeholder process cannot be directly considered in this proceeding. Nevertheless, the PJM Answer attempts to use arguments against the joint Market Monitor/GT Power Group proposal as justification for the March 1<sup>st</sup> Filing. The proposal to consistently select cost-based schedules when resources fail the TPS test is not extreme. In fact, PJM also proposed to consistently select cost-based schedules in the stakeholder process as did the GT Power Group.<sup>5</sup>

The proposal to select the cost-based offer for resources that fail the TPS test does not remove the ability to submit offer schedules, as the PJM Answer argues (at 10). Under any rule based proposal that would select a schedule outside the clearing engine, the market seller will know with certainty in advance which schedule will be selected if it is subject to market power mitigation. Under both the March 1st Filing and the alternative proposals, price-based offers and cost-based offers are still submitted to the market and remain under the market seller's control.

performance-impact-package-comparisons.ashx>.

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See PJM Interconnection, L.L.C., "Performance Impact of the Multi-schedule Model on the Market Clearing Engine," PJM Presentation to the Market Implementation Committee (September 6, 2023), <a href="https://pjm.com/-/media/committees-groups/committees/mic/2023/20230906/20230906-item-03b---">https://pjm.com/-/media/committees-groups/committees/mic/2023/20230906/20230906-item-03b---</a>

#### F. The Commission Did Not Address Markup Switch in Prior Proceeding.

The PJM Answer closes (at 12) by asserting that the Commission has already "addressed and dismissed" the issues raised in the Market Monitor's Protest. The PJM Answer is incorrect. The November 30th Order focused on parameter mitigation. The November 30th Order found (at P 28) insufficient evidence that the status quo tariff is unjust and unreasonable, but the November 30th Order is not a dismissal of the Market Monitor's concerns, and it certainly does not contemplate the changes filed in the March 1st Filing. The November 30th Order does not state that all offers with a negative markup for part of the offer, or offers with a markup switch, are competitive. A low price-based offer or offers submitted with a markup switch could be an exercise of market power or even market manipulation. The fact that market sellers could so easily exercise market power or manipulate the market under the March 1st Filing introduces new scenarios that were not contemplated by the November 30th Order. The findings in the November 30th Order do not justify the March 1st Filing's proposal to stop evaluating the entire offer curve for markup. The November 30<sup>th</sup> Order stated that PJM should not change its commitment and dispatch practices without an associated net benefit. That change without an associated net benefit is exactly what the March 1st Filing proposes. The logic of the November 30th Order supports rejection of the March 1st Filing.

#### 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>6</sup> In this answer, the Market Monitor provides the

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)

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.

#### 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,

office Mayer

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(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).

#### **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 23<sup>rd</sup> day of April, 2024.

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