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March 15, 2023

Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: *PJM Interconnection, L.L.C.*, Docket No. ER23-1138-000

Dear Ms. Bose:

On March 10, 2023, Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor for PJM ("Market Monitor"), submitted comments on the proposed revisions to the PJM market rules in the above referenced proceeding. The Market Monitor files this letter to correct an error in the comments. Please find a corrected pleading attached.

The Market Monitor's comments incorrectly asserted (at 5–6) that PJM's filing is deficient because it did not require that maintenance adders be supported with complete and detailed documentation for the costs of all years included in the calculation of the adders. Proposed provisions in Manual 15 (Cost Development Guidelines) for documentation will require such detailed documentation. The corrected pleading deletes section I.B (at 5–6) in its entirety. The comments are unchanged in all other respects.

If you have any questions regarding this filing, please contact the undersigned at (610) 271-8053.

Sincerely,

Jeffrey W. Mayes, General Counsel

Attachment

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

	)	
PJM Interconnection, L.L.C.	)	Docket No. ER23-1138-000
	)	

COMMENTS OF THE INDEPENDENT MARKET MONITOR FOR PJM

Pursuant to Rule 211 of the Commission's Rules and Regulations,[1] Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor ("Market Monitor") for PJM Interconnection, L.L.C. ("PJM"),[2] submits these comments responding to the filing submitted by PJM Interconnection, L.L.C. ("PJM") on February 17, 2023 ("February 17th Filing"). The February 17th Filing proposes to change administrative aspects of PJM's Variable Operations and Maintenance (VOM) Costs for energy market cost-based offers by separately defining major and minor maintenance; by developing default VOM costs by technology type; and by removing PJM's annual VOM review. The February 17th Filing does not address the core problem of the PJM VOM rules, which is the current rules incorrectly allow avoidable costs (in the form of maintenance expenses) in cost-based energy offers instead of capacity offers (i.e. avoidable cost rates).

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1 18 CFR § 385.211 (2022).

2 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

A. Treatment of Maintenance Costs as Short Run Marginal Costs Is a Core Design Flaw.

PJM Manual 15 and the PJM Operating Agreement Schedule 2 include rules that define Variable Operations & Maintenance ("VOM") costs to be includable in energy market cost-based offers. Under the tariff, any costs includable in energy market cost-based offers are appropriately not includable in capacity market cost-based offers (avoidable costs) in order to avoid double counting.

This rule has been in place only a relatively short time. On October 29, 2018, PJM filed a complaint seeking tariff revisions changing the rules related to VOM costs ("October 2018 Filing").[3] The October 2018 Filing defined all costs "directly related to electricity production" as includable in cost-based energy market offers. The problem is that all costs involved in building, maintaining, and operating a generating unit are directly related to electricity production, including fixed, avoidable and short run marginal costs. The October 2018 Filing failed to clarify the rules and, by proposing a standard that is effectively meaningless and unenforceable, meant that the actual applied meaning of VOM would be subjective. Specifically, the new VOM rules included the long term maintenance costs of combined cycles and combustion turbines in the definition of short marginal costs. These costs had been explicitly excluded from the definition of short run marginal costs in PJM Manual 15 since June 2015.

On April 15, 2019, the Commission accepted PJM's misclassification of long term maintenance costs.[4]

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[3] *See* PJM Filing, Docket No. EL19-8-000 ("October 2018 Filing"). PJM filed a complaint because its proposal did not receive approval in the stakeholder process.

[4] *See PJM Interconnection, L.L.C.*, 167 FERC ¶ 61,030.

The purpose of cost-based energy market offers is to prevent the exercise of market power in the PJM energy market. PJM administers market power mitigation in the energy market by replacing a generator's market-based offer with its cost-based offer when the generator owner fails the structural test for local market power, the Three Pivotal Supplier ("TPS") test, or when the generator is required for reliability. The effectiveness of market power mitigation in delivering competitive market outcomes is based entirely on cost-based offers as the measure of the competitive offer level. When market power is not mitigated, energy prices exceed the competitive level, uplift payments exceed the efficient level, and economic withholding allows generators to collect capacity payments without running, while raising prices for customers. The competitive offer level in the energy market is the short run marginal cost of the generator for the relevant market hour.

Maintenance costs are not short run marginal costs. Generators perform maintenance during outages. Generators do not perform maintenance in the short run, while operating the generating unit. Generators do not perform maintenance in real time to increase the output of a unit. Some maintenance costs are correlated with the historic operation of a generator. Correlation between operating hours or starts and maintenance expenditures over a long run, multiyear time period does not indicate the necessity of any specific maintenance expenditure to produce power in the short run.

A generating unit does not consume a defined amount of maintenance parts and labor in order to start. A generating unit does not consume a defined amount of maintenance parts and labor in order to produce an additional MWh. Maintenance events do not occur in the short run. A generator cannot optimize its maintenance costs in the short run.

The February 17th Filing is a failed attempt to provide a clear line between maintenance expenses includable in energy offers and maintenance expenses includable in capacity offers. PJM's current definition is that only costs directly related to electric production are includable in energy offers. But that definition is effectively meaningless and unenforceable, which means that the actual applied meaning of VOM is subjective. For example, under PJM's definition, if a generator is performing routine maintenance and replaces parts based on the time elapsed since the last maintenance, those expenses are not includable in cost-based offers, but if a generator waits for equipment to fail before it replaces parts, those expenses are includable in cost-based offers.

The February 17th Filing separates maintenance expenses into major and minor and categorizes the maintenance activities listed in Schedule 2 of the Operating Agreement as major and minor maintenance. This exercise simplifies PJM's administrative review process, but does not address the core issue, that maintenance costs are avoidable costs, not short run marginal costs.

The February 17th Filing also introduces default values for operating and maintenance costs and eliminates the operating and maintenance cost annual review. These two features are intended to reduce the administrative burden of having to categorize expenses into those that are directly related to electricity production (includable in the energy offer) and avoidable costs (includable in capacity offers). Every year, market sellers are required to provide PJM with their maintenance expenses in enough detail that PJM can review and determine, based on their opinion, whether such costs are directly related to electricity production. Due to the vagueness of PJM's definition, it is not possible for market sellers to apply a consistent method that would filter out any expenses not directly related to electricity production from their total expenses. The burden imposed by this lack of clarity is a direct result of the incorrect assumption that maintenance expenses are short run marginal costs.

The recent filing by the Indian River 4 coal unit to provide Part V service (informally referred to as Reliability Must Run or RMR) after its deactivation request is a clear illustration of the fact that maintenance expenses are avoidable costs that belong in capacity offers.[5] Indian River 4 proposes that maintenance related project investments, along with capital projects (PI), be compensated as a lump sum instead of recovering such costs in the energy

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5 *See NRG Power Marketing LLC*, Part V Filing, Docket No. ER22-1539-000 (April 1, 2022).

market when the unit operates.[6] Effectively, Indian River 4 includes maintenance expenses in the avoidable cost rate instead of the energy offer.

All generating units have maintenance costs, but only 53 percent of units that were marginal in the energy market included maintenance costs in their energy offers in 2022. Generators exclude maintenance costs from their offers because they are not short run marginal costs and are not part of competitive offers in the energy market. But maintenance costs are part of a competitive offer in the capacity market.

When maintenance costs are not included in energy offers due to competitive pressures and maintenance costs cannot be included in capacity market offers because they are defined to be part of energy costs, those costs are not included in either market, and overall prices and revenues are suppressed as a result. Specifically, the inclusion of maintenance costs in energy offers and the corresponding exclusion of maintenance costs from capacity offers suppresses capacity market prices and overall market revenues. The result of suppressing capacity market prices will also be uneconomic retirements at a time when PJM cannot afford uneconomic retirements.

The Commission should direct PJM to modify the rules to reverse the recent changes and return maintenance costs to capacity market offers and exclude maintenance costs from energy market offers in order to improve the efficiency and competitiveness of PJM markets.

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6 *See id.*, Exhibit No. NPM-004 at 12:4–7.

II. CONCLUSION

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

Respectfully submitted,

Jeffrey W. Mayes

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Dated: March 13, 2023

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 13th day of March, 2023.

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