

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

))
PJM Interconnection, L.L.C.) Docket No. ER23-1067-000
))

**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,¹ Monitoring Analytics, LLC, acting in its capacity as the Independent Market Monitor (“Market Monitor”) for PJM Interconnection, L.L.C. (“PJM”),² submits this answer to the comments and protests submitted in this proceedings on March 1, 2023. This proceeding concerns PJM’s revisions to the market rules for the Effective Load Carrying Capability (“ELCC”) construct and the requirement to have an appropriately defined level of Capacity Interconnection Rights (“CIRs”) consistent with the ELCC value.

I. ANSWER

PJM’s filing is a reasonable approach to the significant issues identified with the valuation of intermittent resources in the capacity market.

Up to this point, the capacity value of intermittent resources was derated (via direct derating or via ELCC) based on the fact that intermittent resources are not 8,760 hour per year resources, but are available only when ambient conditions permit. The derated values were based on an actual or assumed pattern of output during peak summer hours. For

¹ 18 CFR §§ 385.212 & 385.213 (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”).

example, a solar resource with an ICAP or maximum facility output (MFO) rating of 100 MW produced an average of 55 MWh during summer peak hours, including hours with output at 100 MWh, hours with output at 0 MWh and hours with output between those values. The resource's capacity value would be derated from its ICAP of 100 MW to 55 MW. Such a resource would only be required to purchase CIRs equal to 55 MW. The problem with that approach is that it ignored the fact that PJM was assuming that all levels of output up to and including the 100 MWh were deliverable and that PJM was counting on all levels of output up to 100 MWh for reliability. In order to be deliverable, CIRs were needed, but the CIR requirement was only 55 MW. The CIR value should have been and should be 100 MW. Correspondingly, the derated capacity value of the resource was significantly less than 55 MW if the CIR level was only 55 MW.

Put a different way, CIRs were understated below the level actually required for the derated level of capacity, or the derated capacity value was overstated at that level of CIRs.

PJM's rule changes recognize this disparity and propose to remedy the problem and propose a transition mechanism to manage the change for existing resources and resources in the queue.

PJM's filing does not appear to make clear that the performance obligations of intermittent resources also need to be adjusted to reflect the appropriate, higher CIR level. PJM reliability calculations embedded in the ELCC calculations assume that the output will be equal to the full ICAP or MFO value of the resource. That will be the new required CIR level. It is essential that the performance obligation be clear in order for the capacity and energy market signals to be consistent with PJM's reliability calculations and assumptions. The performance obligation includes both the obligation to offer the new, full CIR value, which is greater than the derated value, in the day-ahead energy market and the obligation to perform at the new, full CIR value during PAI events. Hopefully, forthcoming capacity market design proposals will also include the obligation to offer the new, full CIR value in the capacity market.

The objections of Clean Energy and NRDC should be rejected.³ NRDC points (at 2–3, 15–16) to the fact that the PJM proposal will reduce the ELCC values of existing resources, based on the existing level of CIRs. Given PJM’s proposed transition plan, this short term concern is overstated. But regardless, these resources have been assumed to have capacity value in excess of the capacity value supported by their current CIRs and have effectively received a windfall as a result. The PJM transition plan is a fair resolution to the inarguable fact that the current capacity values of intermittent resources are overstated given the existing level of CIRs. NRDC does acknowledge (at 3–4) that the identified problem is real and must be addressed.

Clean Energy (at 5) states that PJM “effectively lowers the CIRs for wind and solar resources.” But the PJM proposal does not lower CIRs. The PJM proposal does reduce the derated capacity value as a result of the understated CIRs, but provides a way for resources to try to avoid impacts in the near term through the transition mechanism. The PJM proposal recognizes that CIRs have been incorrectly set at a level lower than the assumed reliability contribution (the ICAP or MFO). That reliability contribution cannot occur at the artificially reduced CIR levels and the CIRs must be increased as soon as practicable. That is the effect of the PJM proposal.

NRDC asserts (at 2, 19) that the reasons for change have not been explained. To the contrary, the lengthy stakeholder process eventually led to a clear explanation and PJM’s filing reflects that explanation.

Contrary to NRDC (at 2–3), the capacity values will not be “restored.” The final capacity values will reflect the actual reliability contribution to the PJM system. Contrary to NRDC (*id.*), it would be “folly” to continue the current incorrect approach because the current

³ See Limited Protest and Comments of the American Clean Power Association, Solar Energy Industries Association, and Advanced Energy United, Docket No. ER23-1067-000 (March 1, 2023) (“Clean Energy”); Protest of the Natural Resources Defense Council, Docket No. ER23-1067-000 (March 1, 2023) (“NRDC”).

approach overstates reliability. It should be the goal of all market participants to ensure that intermittent resources understand the basis for their capacity value in order to facilitate project planning and development. It should be the goal of all market participants to ensure that intermittent resources are assigned the correct capacity value in order to correctly state the level of reliability of PJM's system. This is particularly true given the expected growth in intermittent resources of all types.

NRDC also argues that the expected resultant increase in capacity market prices is inappropriate. To the contrary, as the Market Monitor's recent reports document, the overstatement of intermittent capacity has inefficiently suppressed capacity market clearing prices.^{4 5}

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.⁶ In this answer, the Market Monitor provides the Commission with information useful to the Commission's decision making process and

⁴ See "Analysis of the 2023/2024 RPM Base Residual Auction—Revised," <http://www.monitoringanalytics.com/reports/Reports/2022/IMM_Analysis_of_the_20232024_RPM_Base_Residual_Auction_20221028.pdf>. (October 28, 2022).

⁵ See "Analysis of the 2022/2023 RPM Base Residual Auction—Revised," <https://www.monitoringanalytics.com/reports/Reports/2023/IMM_Analysis_of_the_20222023_RPM_BRA_Revised_20230113.pdf> (January 13, 2023).

⁶ 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).

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,



Jeffrey W. Mayes

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

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

Dated: March 16, 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 16th day of March, 2023.



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