



PJM Interconnection, L.L.C.
2750 Monroe Blvd
Audubon, PA 19403

Chenchao Lu
Sr Counsel
T: (610) 666-2255
chenchao.lu@pjm.com

July 23, 2021

Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE, Room 1A
Washington, DC 20426

Re: PJM Interconnection, L.L.C., Docket No. EL21-78-000
Informational Filing regarding Interim Steps to Comply with the Commission's
Recent Orders on the Use of Real Time Values

Dear Secretary Bose:

Two recent Commission orders¹ have raised concerns about the current PJM Interconnection, L.L.C. ("PJM") business practices and manual provisions regarding Generation Owners² making changes to their unit-specific parameter limits after the close of the Day-ahead Energy Market.³ In light of those concerns, PJM submits this informational filing to clarify its business practices regarding the submission of Real Time Values necessary for PJM's reliable operation of the electric grid.

In the May 28 Order, the Commission rejected PJM's filing under Federal Power Act ("FPA"), section 205,⁴ to add Real Time Values to the Operating Agreement and

¹ See *PJM Interconnection, L.L.C.*, 175 FERC ¶ 61,171 (2021) ("May 28 Order") and *PJM Interconnection, L.L.C.*, 175 FERC ¶ 61,231 (2021) ("June 17 Order").

² Capitalized terms used, but not defined, in this filing have the meaning set forth in the PJM Open Access Transmission Tariff ("Tariff"), Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. ("OA"), or the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region.

³ The relevant provisions are set forth in PJM Manual 11: Energy & Ancillary Services Market Operations, (rev. 115, effective date June 1, 2021) ("Manual 11"), section 2.3.4.4 (posted at <https://pjm.com/-/media/documents/manuals/m11.ashx>). PJM refers herein to the provisions at section 2.3.4.4 as the "Real Time Values" provisions.

⁴ 16 U.S.C § 824d.

Tariff. In rejecting that filing, the Commission found those proposed rules to be unjust and unreasonable because they “do[] not contain sufficient protections against sellers using Real Time Values to avoid market power mitigation by inappropriately increasing their Notification Time on parameter limited schedules.”⁵ In the June 17 Order issued in this proceeding, the Commission expressed several concerns regarding PJM’s rules on parameter limited schedules, including that “the PJM Tariff appears to be unjust and unreasonable because it fails to contain provisions governing what happens if a seller is unable to meet its unit-specific parameters in real time.”⁶ The June 17 Order initiated an FPA, section 206⁷ proceeding on the noted concerns, and established June 25, 2021 as the refund effective date.⁸

PJM submits this informational filing to notify the Commission of interim steps being taken to comply with the recent findings on the use of Real Time Values and remind Generation Owners that, regardless of the current status of the Real Time Values provisions of PJM Manual 11, Generation Owners are required to provide PJM with their units’ actual or expected physical operating conditions during the Operating Day.

This is required under the exiting provisions of Tariff, Attachment K-Appendix, section 6.6(i), and the parallel provisions of Operating Agreement, Schedule 1, section

⁵ May 28 Order at P 31. The Commission also observed that “[w]hile the Tariff does not explicitly prohibit exceptions to unit-specific values in real time, the Tariff also does not provide for them.” *Id.* at P 33.

⁶ June 17 Order at P 17 (footnote omitted).

⁷ 16 U.S.C § 824e.

⁸ June 17 Order at P 22 and Ordering Paragraph (A). *See PJM Interconnection, L.L.C.; Notice of Institution of Section 206 Proceeding and Refund Effective Date*, 86 Fed. Reg. 33,699 (June 25, 2021). The June 17 Order directed PJM to show cause, within 90 days why its Tariff remains just and reasonable, or identify, on a pro forma basis, just and reasonable Tariff changes. June 17 Order at P 18. The June 17 Order alternatively acknowledges that PJM could separately file changes under FPA section 205 on this issue, and seek to hold the section 206 proceeding in abeyance. *Id.* at P 20.

6.6(i), which provide general rules related to parameter limited schedules and state that “the provisions of this section 6.6 . . . do not affect or change in any way a Generation Owner’s obligation under NERC Reliability Standards to notify the Office of the Interconnection of its actual or expected actual physical operating conditions during the Operating Day.”⁹

In that regard, NERC Reliability Standard TOP-001-5 (Transmission Operations), Measure M3, requires each Generation Operator to “make available upon request, evidence that it complied with each Operating Instruction issued by the Transmission Operator(s) unless such action could not be physically implemented or it would have violated safety, equipment, regulatory, or statutory requirements.”¹⁰ NERC Reliability Standard IRO-001-4 (Reliability Coordination – Responsibilities), Measure M3, imposes similar requirements.¹¹ Similarly, Operating Agreement, section 11.3.1(a) requires each Member to “provide, as reasonably requested, data . . . documents, or records, to [PJM] required for . . . coordination of operations . . . and . . . such other purposes . . . as will contribute to the reliable and economic operation of the PJM Region.” Therefore, the relevant NERC standards as well as PJM’s existing governing documents require Generation Owners to

⁹ Operating Agreement, Schedule 1, section 6.6(i).

¹⁰ NERC Reliability Standard TOP-001-5 (Transmission Operations), M3, at 2. Measure M3 further requires the Generator Operator to “provide copies of the safety, equipment, regulatory, or statutory requirements as evidence for not complying with the Transmission Operator’s Operating Instruction;” or, “[i]f such a situation has not occurred, the . . . Generator Operator . . . may provide an attestation.”

¹¹ See also PJM Manual 1, Control Center and Data Exchange Requirements, Attachment A incorporates NERC Reliability Standard IRO-002-4 (Reliability Coordination – Monitoring and Analysis) (stated purpose: “Provide System Operators with the capabilities necessary to monitor and analyze data needed to perform their reliability functions.”) and Reliability Standard TOP-003-4 (Operational Reliability Data) (stated purpose: “To ensure that the Transmission Operator and Balancing Authority have data needed to fulfill their operational and planning responsibilities.”).

provide PJM with their units' operational capabilities at all times – including after the Day-ahead Energy Market closes.

Parameter limits address, among other things, the varying amounts of energy (if any) a generation unit can inject into the Transmission System over the course of an Operating Day. If PJM dispatchers expect a generating unit to provide a certain amount of output onto the system, but the resource cannot actually inject the needed amount of energy at the time PJM dispatchers expect (including dispatchers' expectations, per the previously established parameter limits, of the time the unit will come online), PJM's ability to maintain proper power balance could be adversely affected. Therefore, it is critical for dispatchers to be made aware of generating units' actual real time capabilities when those differ from the approved unit-specific parameters that will otherwise guide PJM's dispatch of the system over the Operating Day. Accordingly, to ensure system reliability, pursuant to the above-cited Tariff, Operating Agreement and NERC provisions, Generation Owners must continue to be able to advise PJM if, after the close of the Day-ahead Energy Market, their resources will not operate in real time in accordance with their previously established parameter limits.

Notwithstanding the foregoing, during the pendency of the 206 proceeding, in an effort to address the market power concerns raised in the Commission's two recent orders, PJM clarifies that:

1. exceptions to parameter limits sought for an Operating Day at any time before the close of the Day-ahead Energy Market for that Operating Day may be obtained

solely through the temporary exception procedure specified in Operating Agreement, Schedule 1, section 6.6(i);¹²

2. when the Generation Owner first becomes aware, after the close of the Day-ahead Energy Market, of a physical unit limitation or constraint outside management control that will render the unit incapable of satisfying previously established parameter limits, the Generation Owner must promptly notify PJM through Markets Gateway of the constraint and its impact on Operating Day plant capabilities via Real Time Values. PJM clarifies that economic decisions that may impact a unit's capabilities such as electing not to staff a unit would not be deemed a physical limitation or constraint outside of management control;¹³ and
3. no later than three business days after the Generation Owner's notification of a physical unit limitation or constraint outside of management control, the Generation Owner must provide documentation (including, to the extent then available, all evidence and documentation specified in NERC Reliability Standard TOP-001-5 (Transmission Operations), Measure M3) supporting the claimed constraint and how it justified the specific departure from previously established parameter limits.¹⁴

Business practices related to ensuring the operational reliability of the grid are generally described outside of the PJM Tariff. For instance, PJM Manual 14D, section

¹² This requirement is intended to respond to the Commission's reasoning that the existing exception process sufficiently addresses the submission of changes to operational parameters prior to the close of the Day-ahead Energy Market. *See* 175 FERC ¶ 61,171, at P 37 (2021).

¹³ This requirement is intended to address the Commission's concern that Real Time Values "fail to prevent capacity market sellers from using Real Time Values to inappropriately increase their Notification Time on parameter limited schedules." *See Id.* at P 34.

¹⁴ This requirement is intended to address the Commission's concern that documentation should be provided to demonstrate the reason(s) for the change in parameter values. *See Id.* at PP 35-36.

7.3.5 imposes a fuel and emissions reporting requirement on Generation Owners so that PJM has the data available to reliably operate the electric grid and assist in dispatch decisions, especially during certain emergency conditions. Similarly, Real Time Values are needed by PJM dispatchers to ensure continued visibility into the real time operational capabilities of the generation units in the operation of the grid.

PJM is providing this notification of interim steps to comply with the Commission's recent orders because this proceeding concerns rules in the PJM Tariff and Operating Agreement for parameter limited schedules. PJM is concurrently providing this notification to all PJM Members and emphasizes that PJM's operational and reliability need for information regarding real time changes in generating unit capability does not constitute approval or endorsement of the circumstances that caused the unit to depart from the scheduling expectations established prior to the Operating Day, nor does it in any way lessen the Generation Owner's obligation to ensure it does not exercise market power in any PJM market.

The clarifications on the use of Real Time Values will be implemented starting with the August 1, 2021 Operating Day while the Commission considers more fulsome rules relating to the use of Real Time Values and the general market mitigation concerns related to Parameter Limited Schedules. To that end, PJM intends to propose revisions that will further address Real Time Values as part of PJM's response to this Order to Show Cause on September 15, 2021. Ultimately, PJM will revise or adapt these business practices, as necessary, based on any action the Commission may take in this proceeding.

Respectfully submitted,

Craig Glazer
Vice President – Federal Government
Policy
PJM Interconnection, L.L.C.
1200 G Street, NW, Suite 600
Washington, DC 20005
202-423-4743 (phone)
202-393-7741(fax)
craig.glazer@pjm.com

/s/ Chenchao Lu
Chenchao Lu
Senior Counsel
PJM Interconnection, L.L.C.
2750 Monroe Boulevard
Audubon, PA 19403
(610) 666-2255 (phone)
(610) 666-8211 (fax)
chenchao.lu@pjm.com

July 23, 2021

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 Audubon, PA this 23rd day of July 2021.

/s/ Chenchao Lu
Chenchao Lu