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165 FERC ¶ 61,281
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Cheryl A. LaFleur and Richard Glick.

PJM Interconnection, L.L.C. Docket No. ER19-244-000

ORDER ACCEPTING TARIFF REVISIONS

(Issued December 31, 2018)

1. On October 31, 2018, pursuant to section 205 of the Federal Power Act (FPA),[1] PJM Interconnection, L.L.C. (PJM) submitted proposed revisions to PJM's Open Access Transmission Tariff (OATT), Amended and Restated Operating Agreement (OA), and the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region (RAA) (collectively, Governing Documents) to amend PJM's existing Demand Resource[2] registration rules to change the methodology used to determine the daily nominated capacity values for Demand Resources and the Summer and Non-Summer annual nominated capacity values associated with a Demand Resource registration (DR Amendment). PJM also proposed clarifications and other revisions to its Governing Documents pertaining to Demand Resources (Other Tariff Revisions). In this order, we accept PJM's filing, effective January 1, 2019, as discussed below.

I. Background

2. PJM currently permits Curtailment Service Providers (CSPs)[3] to combine end-use customers that are capable of reducing or curtailing load within the same transmission

[1] 16 U.S.C. § 824d (2012)

[2] Capitalized terms not defined herein are used as they are defined in PJM's Governing Documents. *See* OATT, § I.1 Definitions; OA, § 1 Definitions; RAA, Article 1 – Definitions (27.0.0).

[3] CSP is defined in the OATT as "a Member or a Special Member, which action on behalf of itself or one or more other Members or non-Members, participates in the PJM Interchange Energy Market, Ancillary Services markets, and/or Reliability Pricing Model, by causing a reduction in demand." OATT, § 1 – Common Services Provisions, Definitions, C-D.

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zone into one or more Demand Resource registrations (Registration).[4] The total megawatt (MW) load reduction capability of each Registration is termed its annual nominated value. The annual nominated value is calculated as the lesser of the total Summer-Period[5] reduction capability or the total Winter-Period[6] reduction capability of all the end-use customers included on the Registration.[7]

3. Once the annual nominated value is calculated, a CSP then combines one or more Registrations to form a Capacity Performance-compliant Demand Resource that may be offered into PJM's capacity market, the Reliability Pricing Model (RPM). Specifically, the annual nominated values for each Registration in the CSP's portfolio are summed to determine the total Demand Resource load reduction capability, known as the daily nominated value. Once the daily nominated value is calculated, CSPs use the load reduction capabilities of each Registration to fulfill their capacity commitments in the relevant zone as determined by the RPM, and receive capacity payments in proportion to their daily nominated value throughout each applicable delivery year.[8]

II. Filing

A. DR Amendment

4. PJM states that it proposes to revise the existing rules used to determine the daily nominated value for a Demand Resource and an annual nominated value for a Registration. PJM explains that instead of determining the annual load reduction capability of a Demand Resource based on each individual Registration's annual load reduction capability, it will use the Summer- and Winter-Period load reduction

[4] *See* OA, Schedule 1, § 8.11 (5.0.0).

[5] PJM defines Summer Period as the months of June through October and the following May of the Delivery Year. *See* OATT, Attachment DD, § 5.5A.c.i.

[6] PJM defines Winter Period as the months of November through April of the Delivery Year. *See* OATT, Attachment DD, § 5.5A.c.ii.

[7] *See* RAA, Schedule 6, § I (7.0.1); OATT, Attachment DD-1, § I (14.0.0).

[8] *See* RAA, Schedule 6, § J (7.0.1); PJM Manual 18, § 8.2.2 Demand Resources; and PJM Manual 18, Attachment C: Demand Resource Sell Offer Plan.

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capabilities of all Registrations associated with the Demand Resource to determine the annual load reduction capability of the Demand Resource.[9]

5. PJM states that, effective with the 2019/2020 Delivery Year commencing on June 1, 2019, it will no longer calculate an annual nominated value for each Registration, and will instead calculate only Summer-Period and Winter-Period nominated values at the Registration level.[10] PJM states that it will then calculate the daily nominated value of a Demand Resource as the lesser of (i) the sum of the Summer-Period nominated values of the constituent Registrations or (ii) the sum of the Winter-Period nominated values of the constituent Registrations.

6. PJM explains that with the introduction of new capacity products, including Summer-Period Capacity Performance Resources (Summer Demand Resource), for the 2020/2021 Delivery year, it will calculate two daily nominated values for each Demand Resource: a daily nominated Value for the Summer Period, and a daily nominated value for the "non-summer period."[11] PJM states the non-summer daily nominated value for a Demand Resource will equal the lesser of the sum of the Summer- or Winter-Period nominated values of its constituent Registrations, and the Summer-Period daily nominated value will equal the sum of the Summer-Period nominated values of its constituent Registrations.[12] PJM explains that a Demand Resource can commit up to its non-summer daily nominated value as an annual Demand Resource—because the non-summer value represents the Demand Resources ability to perform during both Summer and Winter Periods—and, additionally, can commit up to the (positive) difference between its non-summer daily nominated value and Summer-Period daily nominated value as a Summer Demand Resource.[13]

7. PJM asserts that these changes will obviate the need for CSPs to determine which end-use customer locations to aggregate to maximize a Demand Resource's daily nominated value, and will avoid the result of end-use customer capabilities left unaccounted for on Registrations. PJM states that the changes will also provide it greater

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[9] PJM Transmittal at 6.

[10] *Id.* at 6-7.

[11] PJM explains that the daily nominated value for the non-summer period actually refers to the Demand Resource's "maximum capabilities for *both* the [S]ummer and [W]inter [P]eriods." *Id* at n.8 (emphasis added).

[12] *Id.* at 7.

[13] *Id.* at 7-9.

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dispatch flexibility because each Registration will now likely be associated with only one end-use customer location.[14] PJM explains that because it dispatches Demand Resources by registration, when CSPs combine multiple end-use customers on a single Registration under current rules, PJM may dispatch end-use customer locations that have no impact where needed simply because they are included on the same Registration as other end-use customer locations. PJM contends that the proposed revisions will afford more flexibility to dispatch only specific end-use customer locations when needed.[15]

B. Other Tariff Revisions

8. In addition to the Tariff revisions necessary to implement PJM's DR Amendment, PJM includes other revisions to certain sections of its Governing Documents. PJM states that these are clarifications and non-substantive revisions and part of its ongoing efforts to review and make non-controversial and non-substantive revisions to ensure consistency and accuracy.[16] PJM states that one of these revisions, which addresses the measurement of compliance for Demand Resources during a Performance Assessment Interval, is needed because PJM's RAA does not fully explain how a Registration will demonstrate compliance over a Performance Assessment Interval for a Registration that lacks five-minute metering technologies.[17]

III. Notice of Filing and Response Pleadings

9. Notice of PJM's October 31, 2018 filing was published in the *Federal Register*, 83 Fed. Reg. 55,709 (2018), with interventions and protests due on or before November 21, 2018. Timely motions to intervene were filed by Monitoring Analytics, acting in its capacity as the Independent Market Monitor for PJM (IMM), Advanced Energy Management Alliance (AEMA), Direct Energy, Dominion Energy Services, Inc., NRG Power Marketing LLC, and American Municipal Power, Inc.

10. On November 20, 2018, the IMM filed a protest. On December 6, 2018, PJM and AEMA filed answers to the IMM's protest. On December 20, 2018, the IMM filed an answer to AEMA's and PJM's answers.

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[14] PJM notes that, going forward, only end-use customers with MW reducing capabilities below 100 kW will be allowed to combine on a single Registration.

[15] PJM Transmittal at 9; PJM Answer at 3-4.

[16] *Id.* at 15.

[17] *Id.* at 17-18.

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A. IMM Protest

1. DR Amendment

11. In its protest, the IMM argues the Commission should reject PJM's proposed DR Amendment since it would erode the locational price signals in PJM's markets.[18] The IMM asserts that by permitting more intra-zonal matching, the DR Amendment does not respect the locational pricing structure of PJM's capacity market, which signals where resources are more valuable (i.e., in a constrained area). Further, the IMM charges that the DR Amendment will artificially overstate the capacity value of Demand Resources, which will displace other capacity resources.[19]

2. Other Tariff Revisions

12. The IMM protests PJM's proposed revision to clarify how to measure compliance for Demand Resources during a Performance Assessment Interval. The IMM argues that estimating load reduction by flat-profiling is identical to calculating load reduction compliance entirely on an hourly basis and is, therefore, inappropriate. The IMM adds that rather than "grandfathering" old metering technologies to measure load reductions, PJM should require five minute interval metering technologies.[20]

B. Answers

1. DR Amendment

13. AEMA states that it supports PJM's DR Amendment and argues the concerns contained in the IMM's protest are misplaced. AEMA states that PJM's current rules may over-procure Demand Resources by undervaluing their actual physical capabilities.[21] AEMA argues the DR Amendment will benefit CSPs by lessening their administrative burden during the Registration process, as well as benefit PJM by providing PJM operators with greater dispatch flexibility. Further, AEMA notes that the Commission has previously approved mechanisms that enable year-round market participation for seasonally-limited resources to ensure Capacity Performance compliance.[22] Therefore,

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[18] IMM Protest at 2.

[19] *Id.* at 2.

[20] *Id.* at 5-6.

[21] AEMA Answer at 1-2.

[22] *Id.* at 3 (citing *PJM Interconnection, L.L.C.*, 162 FERC ¶ 61,159 (2018)).

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AEMA argues, the DR Amendment is just and reasonable and should be accepted by the Commission.[23]

14. PJM reiterates that the DR Amendment will provide PJM with greater flexibility when dispatching Demand Resources by generating a more accurate representation of actual load-reducing capabilities.[24] PJM challenges the IMM's argument that the DR Amendment will erode the locational price signals in PJM's markets by noting that the locations of Demand Resources are already included in the market clearing process. Additionally, PJM states that, under existing rules, when a Demand Resource receives a capacity commitment for a certain Locational Deliverability Area, its constituent Registrations must all be from the same Locational Deliverability Area to satisfy that capacity commitment.[25]

15. The IMM responds to AEMA and PJM arguing that a nodal dispatch requirement will not reduce demand resource participation in the capacity market, and further, that the absence of such a requirement will require PJM to guess the effectiveness of local demand resources during a Performance Assessment Interval based on a physical address because they will no longer be mapped to individual nodes.[26] The IMM argues that the Demand Resource's electric location - the relevant node - would make demand resources a more effective resource for PJM dispatchers, remove the guesswork from dispatch and improve efficiency.[27]

2. Other Tariff Revisions

16. Both AEMA and PJM counter the IMM's protest that assessing Demand Resource compliance during a Performance Assessment Interval is inappropriate, and allege the IMM's protest on this issue constitutes a collateral attack on the Commission's February 21, 2018, order on PJM's compliance with Order No. 825.[28] AEMA argues that

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[23] AEMA Answer at 4-5.

[24] PJM Answer at 2-3.

[25] *Id.* at 3.

[26] IMM Answer at 3-4.

[27] *Id.*

[28] *PJM Interconnection, L.L.C.*, 162 FERC ¶ 61,150, at P 48 (2018).

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flat profiling was implemented for capacity Demand Resources in 2014.[29] PJM argues the Commission explicitly rejected similar arguments from the IMM in the order on compliance to Order No. 825 as "inconsistent with the directives in Order No. 825."[30]

17. The IMM counters that flat-profiling the hourly metered load to measure compliance during a Performance Assessment Interval will not accurately measure five-minute load.[31] The IMM argues that it is impossible to measure activity during a five minute interval with an hourly interval meter and states there is no way to ensure a load reduction occurred during a five minute interval without using a five minute interval meter.[32] The IMM argues that a demand resource that follows dispatch instructions and a demand resource that does not follow dispatch instructions could receive the same performance results and warns failure to apply the same measurement standard to all capacity resources provides an unwarranted advantage for demand resources.[33]

IV. Discussion

A. Procedural Matters

18. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2018), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

19. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2018), prohibits an answer to a protest or to an answer unless otherwise ordered by the decisional authority. We accept the answers filed by AEMA, PJM and the IMM because they have provided information that assisted us in our decision-making process.

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[29] AEMA Answer at 9-10 (citing *PJM Interconnection, L.L.C.*, 147 FERC ¶ 61,103, at P 130 (2014)).

[30] PJM Answer at 4-5 (citing *PJM Interconnection, L.L.C.*, 162 FERC ¶ 61,150 at P 48).

[31] IMM Answer at 1.

[32] *Id*. at 1-2.

[33] *Id.*

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B. Substantive Matters

20. As discussed below, we accept PJM's proposed revisions to its Governing Documents, effective January 1, 2019, as requested.

1. DR Amendment

21. We find that PJM's proposed DR Amendment is just and reasonable. We find that PJM's proposed DR Amendment, by modifying the Demand Resource registration structure to reflect seasonal capabilities, will help ensure accurate characterization of the curtailment capabilities of end-use customers.

22. The IMM argues that allowing aggregation of Registrations across nodes erodes the locational component of the capacity market and energy market.[34] We disagree. CSPs are already permitted to aggregate end-use customers located across a single transmission zone within a Registration[35] and to satisfy a Demand Resource capacity commitment with multiple Registrations.[36] The proposed revisions do not modify either of these permissions, and we find no evidence in the record to suggest that the instant changes will erode locational price signals.

23. The IMM further argues that PJM's proposal artificially increases the amount of demand resources that are claimed and must be paid for in the capacity market without changing anything about the actual physical characteristics of the resources.[37] However, the seasonal capabilities that will now be reflected on Registrations are based on the actual curtailment capabilities of the constituent end-use customer locations. Simply because the new rules may result in Demand Resources' having greater capacity value in RPM does not mean that that value is "artificial" or inappropriate. To the contrary, PJM's proposed changes should help to define more accurately end-use customer locations' actual ability to curtail load in response to PJM dispatch.

2. Other Tariff Revisions

24. We find that PJM's use of flat profiling for Demand Resources that lack five-minute metering technologies is a just and reasonable means to assess Demand Resource compliance during a Performance Assessment Interval.

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[34] IMM Protest at 2.

[35] *See* OA, Schedule 1, § 8.11 (5.0.0).

[36] *See* RAA, Schedule 6, § A (13.0.0)

[37] IMM Protest at 2.

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25. The IMM argues that PJM's proposal is not just and reasonable because it does not require installation of five-minute interval meters by all end-use customers that comprise a Demand Resource. PJM states that it does not disagree with the theoretical concept that five-minute interval meters are more accurate, but argues that what it proposes in the instant filing is consistent with its existing metering protocols and is just and reasonable. We agree. PJM's proposal presents a compliance measurement methodology that is capable of reasonably reflecting Demand Resources' performance during Performance Assessment Intervals.

26. Our acceptance of PJM's proposal here is also consistent with previous Commission findings. In multiple orders, the Commission has declined to require Demand Resources to upgrade to five-minute metering technologies, explaining that, in the case of PJM's Order No. 825 compliance, "this Final Rule does not contemplate requiring any new metering capability, such as [5]-minute revenue quality metering, and that such metering is not necessary for implementation given RTOs'/ISOs' ability to create [5]-minute load and generation profiles using telemetry and hourly revenue quality data."[38] Though these orders concerned PJM's transition to sub-hourly settlements in the energy market, the IMM has not shown why PJM's proposal to use the same flat profiling methodology for evaluating Demand Resources' compliance in the capacity market would warrant a different result.

The Commission orders:

PJM's proposed revisions to its Governing Documents are hereby accepted, effective January 1, 2019, as discussed in the body of this order.

By the Commission. Commissioner McIntyre is not voting on this order.
Commissioner McNamee is not participating.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

[38] *PJM Interconnection, L.L.C.*, 162 FERC ¶ 61,150 at P 48 (citing Order No. 825, FERC Stats. & Regs. ¶ 31,384 at P 98).

Document Content(s)

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