

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

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March 22, 2022

The Honorable Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Room 1A Washington, D.C. 20426

Re: PJM Interconnection L.L.C., Docket No. ER22-1420-001 Market Participation of Hybrid Resources and other Mixed Technology Facilities

Dear Secretary Bose,

Pursuant to Section 205 of the Federal Power Act ("FPA"),¹ and Part 35 of the Federal Energy Regulatory Commission's ("FERC" or the "Commission") regulations,² PJM Interconnection, L.L.C. ("PJM") hereby submits Part 2 of the previously submitted filing in this docket with Accession No. 20220322-5047. The filing is submitted in two parts to comply with eTariff limitations of including two versions of a new Tariff section with two different effective dates, with this Part 2 being filed as an amendment to Part 1, containing version 1.0.0 of Tariff, Attachment K-Appendix, section 1.4C and Operating Agreement, Schedule 1, section 1.4C.

Respectfully submitted,

Craig Glazer Vice President – Federal Government Policy PJM Interconnection, L.L.C. 1200 G Street, N.W., Suite 600 Washington, D.C. 20005 (202) 423-4743 Craig.Glazer@pjm.com <u>/s/ Erin Lai</u>

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On behalf of PJM Interconnection, L.L.C.

¹ 16 U.S.C. § 824d.

² 18 C.F.R. Part 35.

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 22nd day of March 2022.

<u>∕s∕ Erin Lai</u> Erin Lai Attachment C

Revisions to the PJM Open Access Transmission Tariff and PJM Operating Agreement with Proposed Effective Date of 12/31/9998

(Marked/Redline Format)

<u>Hybrid Resources may participate in markets according to the following provisions in this</u> section 1.4C, as further detailed in the PJM Manuals. Hybrid Resources are settled in markets as <u>a single unit.</u>

(a) Energy that the Market Participant of an Open-Loop Hybrid Resource purchases from the PJM Interchange Energy Market for charging the storage component must be Direct Charging Energy. Direct Charging Energy shall not be purchased for charging the storage component of Closed-Loop Hybrid Resources.

(b) The Market Participant of an Open-Loop Hybrid Resource shall arrange for Network Integration Transmission Service or Point-to-Point Transmission Service for purchases of Non-Dispatched Charging Energy. Network Integration Transmission Service and Point-to-Point Transmission Service are not required for purchases of Dispatched Charging Energy.

(c) Hybrid Resources consisting of a solar component and a storage component shall be eligible to be dispatched for positive megawatts as otherwise applicable, to set price at positive megawatt points on their offer curve as otherwise applicable, and to self-schedule positive megawatt quantities, pursuant to the requirements of the PJM Manuals. Such Hybrid Resources shall specify a single energy offer curve with monotonically increasing dollar values. Open-Loop Hybrid Resources consisting of a solar component and a storage component shall be eligible to be dispatched for negative megawatts (i.e., charging) as otherwise applicable, to set price at negative megawatt points on their offer curve as otherwise applicable, and to self-schedule negative megawatt quantities, pursuant to the requirements of the PJM Manuals. In addition, such Hybrid Resources operating in Continuous Mode shall specify a single energy offer curve with monotonically increasing dollar values including both positive and negative megawatt quantities.

(d) Hybrid Resources shall be responsible for management of their own State of Charge, provided that they must comply with PJM operational orders regardless of the incidental impact on State of Charge.

(e) Hybrid Resources may offer quantities equivalent to 0.1 MW or greater into all applicable PJM markets.

(f) During intervals in which the storage component of a Hybrid Resource is not actively managing the net output of such resource, the Market Participant of such resource shall indicate such status to PJM.

iii) electric energy that is discharged by the energy storage component and injected onto the grid; and iv) electric energy that is discharged from the energy storage component and consumed by on-site end-use load that is not Station Power (if any such on-site end-use load exists). The measurement systems shall comply with the accuracy requirements for meters as described in PJM Manual 01. Additional details for the configuration of such measurement systems under various specific configurations are specified in PJM Manual 14D.

If the distribution utility is unwilling or unable to net out from the host customer's retail bill Direct Charging Energy associated with an Open-Loop Hybrid Resource that is distributionconnected or co-located with end-use load that is not Station Power, then PJM shall not bill the corresponding Market Participant for any Direct Charging Energy.

Market Participants shall only be credited for sale transactions in PJM markets of electric energy produced from Open-Loop Hybrid Resources if that same sale transaction of electric energy is not also credited at retail.

[Reserved.]

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[Reserved.]

Attachment D

Revisions to the PJM Open Access Transmission Tariff and PJM Operating Agreement with Proposed Effective Date of 12/31/9998

(Clean Format)

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