

DER Aggregator Participation Model: Overview

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Market Implementation Committee

- Over the past 5+ years, PJM has engaged in a compliance process to design a market participation model for DER resources consistent with FERC Order 2222.
- Because of the long compliance process, the original Tariff/OA/RAA redlines approved by FERC may include outdated terminology and section references, and generally be inconsistent with current market design, especially with respect to the RPM.
- PJM staff have identified several instances where the original language approved by FERC must be updated, in part to comport with the changes to the capacity market that occurred *after* FERC's initial approval of the DER model design.
- PJM intends to make a clean-up filing next month to correct the identified discrepancies.
- This presentation is intended to provide transparency to stakeholders regarding the upcoming filing.

1. DER model-related redlines, initially drafted as part of RAA Schedule 9.1, must now be included in RAA Schedule 9.2.
2. Several definitions in RAA Article 1 must be updated, and their effective date moved up from February 2028 to December 2025.
3. The energy and A/S market provisions, approved to go into effect on February 2, 2026 based on PJM's earliest compliance filing, must be struck from the Tariff and made effective in 2028 only.

- FERC originally approved PJM's capacity market provisions for DERs in March 2023.
- Subsequently, PJM revised its capacity market rules via the CIFP-RA process (ER24-99).
- Under this filing, RAA Schedule 9.1 was sunset and replaced with Schedule 9.2.
 - At the time of drafting, DER-related language was not effective in Schedule 9.1 and was therefore not included in Schedule 9.2.
 - Redlines to Schedule 9.1 (already approved by FERC) must be similarly reflected in Schedule 9.2 ahead of the determination of the ELCC values for resources participating in the DER model.

- While 9.1 and 9.2 are broadly similar, the new language approved under ER24-99 necessitates revisions to some of the approved DER model language for clarity and consistency with the current market rules.
- Example:
 - (2) The ELCC Resource Performance Adjustment shall be calculated according to the following methods, as further detailed in the PJM Manuals:
 - (a) (i) For a **Generation** Variable Resource, a Limited Duration Resource, and an Unlimited Resource: based on a metric consisting of the weighted average expected hourly output of the resource in the ELCC model during hours of loss of load risk where: (i) the weights correspond to the modeled probability of losing load in such hour and (ii) the expected hourly output is based on the resource's modeled output during the same hour on days since June 1st, 2012 identified as having similar weather from an RTO-perspective. For a given resource or component, the Performance Adjustment shall equal the ratio of such metric to the average (weighted by the Effective Nameplate Capacity) of such metrics for all units in the applicable Variable Resource ELCC Class or applicable Unlimited Resource ELCC Class or; (ii) for a Component DER Variable Resource: based on expected performance during times of PJM's expected peak net load and gross load hours.

- PJM's original 2222 compliance filing put forward two versions of Article 1:
 - One version that was to be effective earlier (effective now), coinciding with the implementation of the capacity market provisions of the RAA.
 - Another that covered terms related to the energy and A/S market model, which was to go into effect at a later date. This version will become effective Feb 1, 2028.
- Several definitions in the second version contain redlines that are relevant to the capacity market and should be effective now (e.g., Variable Resource, Limited Duration Resource).
- PJM intends to make all of RAA Article 1 definitions effective as of mid-December 2025 (or upon FERC approval of PJM's filing).
- Some definitions must also be cleaned-up to match currently accepted language (e.g., "ELCC Resource").

3. Full DER Model Effective Dates

- In PJM's original compliance filing, we proposed to implement the full DER Aggregator Participation Model on February 2, 2026.
- Subsequently, PJM requested, and FERC approved, moving the effective date for the energy and A/S provisions of the DER model to February 1, 2028.
- However, due to how eTariff is implemented, the language approved for Feb 2026 is not *moved*. Rather, a *new set* of Tariff/RAA sheets is created with the later effective date.
- PJM must make a separate filing *to remove the 2026-dated records* to ensure that the language only becomes effective in 2028.

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**FERC Order 2222 Compliance Filing Update – DER
Aggregator Participation Model**



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