



EE Model Improvements for PJM

July 2024 – MRC First Read



Disclaimer

This presentation is a good faith effort to facilitate a path forward for a workable future PJM EE model. This presentation is not intended to be used in any pending FERC litigation. No proposals or commentary herein should be interpreted that CPower is asserting that the current PJM EE model is or is not just and reasonable.

2015 Load Forecast Changes & Addback

Load forecast changes included:

- End Use Trends
- Revise weather variables
- Add distributed solar generation and separate solar forecast

End-Use Trends:

Measures of the stock and efficiency of various electrical equipment and appliances used in residential and commercial settings are included in the forecast models, grouped by heating, cooling, and other. End-use variables for each PJM zone are applied by Census Division, as presented in Exhibit 3. End-use variables are weighted by the Residential and Commercial sales of each zone, per FERC Form 1 filings.

PJM Manual 19 Changes PJM Presentation to MRC, October 22, 2015: M19, Section 3.2

Addback was developed afterwards without a stakeholder process.

EE Forecast & Addback Mechanism

- 2015 changes adopted without a tariff change or FERC review created numerous problems.
- EE forecast methodology is opaque, unverifiable, and incapable of being tested for its accuracy.
- Whole-of-economy, top-down approach to EE forecast is woefully inadequate, and results in overgeneralized subjective EE assumptions. This approach undermines state and local policies to promote EE and customers' efforts to reduce capacity costs from EE investments.
- EE forecast, including both general efficiency trends and PJM EE resources are completely divorced from energy or capacity pricing, yet we are relying upon it to influence market outcomes. Same amount of EE (whatever it is) is subtracted from load forecast regardless of whether prices are high or low.
- Supply side EE impacts price formation and system reliability as part of the VRR curve.
- Addback mechanism, adopted almost as an afterthought, is a static adjustment that removes supply side EE from the load forecast in order to prevent "double counting."
- Cannot reform EE addback mechanism without also considering reform to EE forecast methodology.
- EE is not being treated comparably to other resources – e.g. post-2015 changes, EE not permitted to replace other types of capacity resources.

Proposal 1 – EE Forecast and Addback Mechanism

- **Proposal 1** – Subject to the outcome, if any, of the Technical Conference requested at FERC, initiate a problem statement/issue charge with a singular focus on resolving the identified concerns with the EE forecast model and addback mechanism.
- Not proposing a specific change at this time to EE forecast and addback mechanism. This issue is currently before FERC in several complaints.
- Stakeholder process would focus on getting EE forecast and addback mechanism (if applicable) right so that it is accurate and free from bias, fairly treats EE resources, and is not distracted by unrelated M&V or other issues that have bogged down stakeholder process.

Proposal 2 & 3 - Capacity Rights and Ownership Tracking

- **Proposal 2** - Add tariff/manual language that PJM will require documentation that customer has agreed through contract or other agreement:
 - 1) to transfer exclusive EE capacity rights that customer owns to EE provider, or
 - 2) that EE provider will retain exclusive EE capacity rights as a result of implementation of EE measure.
- **Proposal 3** - Require PJM to adopt an EE registration tracking system similar or identical to DR to ensure that only 1 entity can claim EE capacity rights.
- Require location identification.*
- Any duplicate claims of EE capacity rights addressed in the same way as duplicate DR registrations to determine ownership.

* - By customer or at least to the EDC zone. Depending upon retail arrangements and EE application (e.g. mass-market programs), it may be sufficient not to require all locations to be identified.

Proposals 4 & 5 - Measurement and Verification

- **Proposal 4** - Initial and Updated M&V Plans submissions separate from Nominated Values prior to an auction. M&V Plans may be submitted to PJM at any time; new M&V models must be submitted at least 3 months prior to Nominated Value submission (4 months prior to the relevant auction) to allow for consideration.
- **Proposal 5** - Add rigor to M&V Plan review and approval process. Institute formal iterative review and approval process of M&V methodologies that conforms to international, national and state EE M&V evaluation protocols.
 - Consider expert third-party evaluator like what many states use to approve M&V Plans.
 - Approval based upon applicable industry standard best practices and relevant standards. No requirement for state TRMs approval or geographical or time limitations.
- This approach fosters innovation in energy efficiency approaches.
- PJM approval establishes approved methodology that EE provider can rely upon.
- Post Installation M&V Report approval process confirms the EE provider has calculated volumes in accordance with following the approved M&V plan.

Proposals 6 & 7 – Codify M&V Rules and “Guidance”

- **Proposal 6** – Following a review by DIRS and further stakeholder input, material and substantive M&V requirements found throughout various templates, training materials, and various guidance communications to be placed in tariff or manual, as appropriate.
- **Proposal 7** – Non-proprietary standard M&V methodologies and procedures should be made publicly available as “models” for all market participants to achieve more standardization (perhaps not necessary to place these items in a manual).

Proposals 8 & 9 – Clarify Eligibility and Eliminate Obsolete Language

- **Proposal 8** – Retain Status Quo for EE eligibility, that is each installation would continue to be eligible for four years following its installation. Obsolete language in section 1.2 of Manual 18B tying eligibility to date of load forecast would be removed.
- **Proposal 9** – Consistent with FERC precedent, EE capacity should be fully substitutable for any other type of capacity.

Summary of Proposals

1. Institute stakeholder process to evaluate EE forecast methodology and addback mechanism.
2. Document agreement with customer regarding capacity rights ownership.
3. EE registrations tracking system.
4. Bifurcate M&V Plan approval from Nominated Value determination with more time for evaluation of M&V plans.
5. Make M&V Plan approval a more detailed iterative process.
6. Move substantive requirements into tariff and manuals.
7. Standardize M&V for common, non-proprietary EE approaches, and publish them.
8. EE installations retain four-year eligibility.
9. EE capacity should be fully substitutable for other types of capacity.



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