

Capacity Market Enhancements – CETL

Issue Source

This Issue Charge is presented by LS Power

Issue Content

The accreditation methodology enacted under ER24-99 and subsequently described by PJM through additional education sessions changed the long-term incentives investors previously faced under the prior accreditation methodology. Moving to the marginal ELCC accreditation methodology from the EFORd methodology previously used by PJM for dispatchable resources, dulled the market signals that investors can respond to through capital investment and business practice modification. While the marginal ELCC approach to more closely align the value of capacity with the performance of resources during critical periods is a necessary step in the evolution of the capacity market, an unintended consequence of the new methodology is uncertainty about what investors can do to improve unit resource accreditation or efficiently invest in resources that will improve overall resource adequacy.

An important change manifested in the ELCC methodology changes is a shifting of the calculation of risk to those periods throughout the year where a combination of temperature/load scenarios and generation performance scenarios combines to create an expectation for loss of load. Under PJM's analysis, the bulk of risk of loss of load shifted from the summer peak period to winter stress periods.

Importantly, however, there appears to be a disconnect between the Expected Unserved Energy (EUE) used in the ELCC methodology to determine the annual accreditation and PJM's continued use of the Summer Peak to determine the Capacity Emergency Transfer Limit (CETL) for the Local Delivery Areas (LDAs).

Under the previous capacity accreditation methodology, the Capacity Market risk was focused on the summer peak periods, where it made sense to calculate the summer peak CETL such that the results reflected transfer limits at the riskiest periods modeled for the year. Having switched now to a model that assesses risk throughout the year, using a summer peak-based CETL calculation without reference to the EUE distribution creates a misalignment between the periods when capacity is most valuable and the transfer limits for LDAs during those periods (anecdotally, during Winter Storm Elliott, it appeared that there was insufficient west-to-east transfer capability, despite no such transmission constraints being modeled in the CETL analysis).

Such a misalignment will affect the relative pricing of capacity between LDAs, potentially leading to incorrect capacity prices and bad investment signals at a time when those price signals must be clear and precise to incentivize incremental new investment in the RTO.

Key Work Activities and Scope

1. Education of how CETL is calculated and applied to the Capacity Market
2. Development of methodology(ies) to align the CETL with the shift in risk from the summer peak to the winter period
3. Provide education on the impact of those methodology(ies) to the summer peak analysis and the winter risk period.
4. Develop proposal package(s) for vote, as appropriate, based on the above analysis, discussion, and findings.

Out of Scope

- Changes to capacity accreditation that do not fit within the marginal ELCC framework recently approved by the Commission in Docket No. ER24-99 (i.e. proposals for accreditation methodologies alternative to marginal ELCC are not within the scope of this issue charge).
- Changes that require a sub-annual market.

Expected Deliverables

1. Education and analysis as needed concerning items identified in the scope of work.
2. Proposed solution(s) and corresponding revisions to PJM's governing documents and manuals, as appropriate.

Decision-Making Method

Tier 1, consensus (unanimity) on a single proposal (preferred default option).

Stakeholder Group Assignment

This issue will be considered in ~~the Planning Committee (PC)~~ Effective Load Carrying Capacity Senior Task Force (ELCCSTF).

Expected Duration of Work Timeline

This effort should be completed to support any necessary FERC filing by ~~the end of Q1 May~~, 2025.

Start Date	Priority Level	Timing	Meeting Frequency
Click here to enter a date.	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	<input checked="" type="checkbox"/> Immediate <input type="checkbox"/> Near Term <input type="checkbox"/> Far Term	<input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly

Charter

(check one box)

Issue Charge

<input type="checkbox"/>	This document will serve as the Charter for a new group created by its approval.
<input checked="" type="checkbox"/>	This work will be handled in an existing group with its own Charter (and applicable amendments).