

Capacity Market Enhancements – CETL

Problem / Opportunity Statement

Based on information provided by PJM after the FERC approved the new ELCC capacity accreditation methodology for all resources in Docket ER24-99, the long-term viability of certain assumptions used in that methodology must be reexamined. Given the large adjustments recently announced to near- and long-term load growth expectations and additional retirement declarations, it has become increasingly important to determine whether the accreditation approach as implemented by PJM will incent needed investment in new and existing resources to maintain resource adequacy.

In Docket ER24-99, PJM proposed, and the FERC approved a new methodology to accredit resources' capacity capabilities using a marginal Effective Load Carrying Capability (ELCC) approach. After the FERC's approval of PJM's proposal, PJM provided additional information about the specific sensitivities and interrelationships of the ELCC methodology.

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, 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.