

Capacity Market Enhancements – Resource Adequacy Analysis Enhancements

Issue Source

This Issue Charge is presented by LS Power and Calpine

Issue Content

The reliable supply of electric services within the PJM RTO depends on adequate and secure generation and transmission facilities. Resource Adequacy analysis focuses on the supply of electricity, specifically, the process of determining the amount of generating capacity required to:

- provide electrical energy to satisfy customer load, **especially during peak demand periods such as a heat wave or cold snap**
- ensure an acceptable level of generation system reliability – Adequacy

PJM is responsible for performing an annual study to calculate the amount of resource capacity that meets the defined reliability criteria. The objective of the study is to determine the amount of both, installed and accredited unforced capacity that the system requires to meet the RTO-wide resource adequacy criteria. Specifically, the study is performed for at least each of the next five Delivery Years.

Among the key parameters used in the study are two, legacy parameters that pre-date the competitive markets - the Capacity Benefit Margin (CBM) and the Capacity Benefit of Ties (CBOT). Recent events including PJM being a net exporter of energy during emergency events and decreasing capacity reserve margins create a situation to review the CBM and CBOT for their effectiveness and continued use.

Key Work Activities and Scope

1. Education of CBOT and CBM and their use in resource adequacy analysis
2. Review of historic PJM imports and exports with focus on emergency periods
3. Assessment of the continued use of CBOT and CBM in the resource adequacy analysis process
4. Assessment of whether load forecasting should include an amount for exports

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

The CBOT and CBM-related items will be considered in the Resource Adequacy Analysis Subcommittee (RAAS) Assessment of whether load forecasting should include an amount for exports will be considered in the Load Analysis Subcommittee (LAS).

Expected Duration of Work Timeline

This effort should be completed to support any necessary FERC filing by the end of Q1, 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)

<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).