

Joint Stakeholder Package

Amazon, Calpine, Constellation, Google, Microsoft, Talen

PJM CIPF – Large Load Additions

Stage 4, November 19, 2025

Package Overview

- Large Load Forecasting Improvements
- Demand Side
- Reliability Backstop Alternative

Large Load Forecasting Improvements

- Only include large new load that has a meaningful/verifiable commitment. Examples of which include:
 - Energy Service Agreement
 - Credit/collateral support
 - Financially significant infrastructure investment
 - Long-term supply commitment with new or existing resources
- Improve large load modeling assumptions including, but not limited to, ramp rate assumptions, utilization rates, and reduction of double counting
- Implement a Large Load Forecast “Reality Check”: Consider other relevant factors that may predict whether all proposed large load is likely to come to fruition. Examples include, but are not limited to:
 - Historic large load success rate and development progress reviews along with comparison to supplemental projects
 - Supply chain and other limitations such as chip (un)availability
 - Other business expert reviews (McKinsey, S&P, BNEF, LEI Study, LBNL, etc.)
 - Conversations/information exchange among large load customers, PJM, and TOs

New Demand Side Products

- Voluntary large load limited demand response
 - Allow large load to clear as limited demand response. Discounted Effective Load Carrying Capability (ELCC) to reflect the reduced availability. Two, new limited products would be defined as:
 - 24 hours/year with no single interruption greater than 6 hours
 - 100 hours/year with no single interruption greater than 10 hours
- Back-up generator operations
 - Provide relief during system emergencies using back-up generators. Agree to operate within criteria acceptable to the owners (i.e., consistent with their commitment to the environment, noise reduction, etc.). Establish new PJM

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emergency procedure step, 9A, for deployment immediately prior to manual load dump. Discounted ELCC to reflect the reduced availability.

Reliability Backstop Alternative

- The reliability backstop alternative would only be utilized if triggered.
 - Trigger: Only used in years when RPM clears below 98% of the reliability requirement.
- Avoid overreliance on potentially lower quality and/or out-of-market services which could have a long-term impact on the market and its ability to signal investment when needed. Every attempt made to minimize such impact although it can't be eliminated.
- Eligible resources can (at their option) offer a minimum term supply commitment at the top of the Variable Resource Requirement (VRR) curve.
- Bidders may offer up to 7 years but shorter-term offers will clear first.
- Eligible resources include: new/reactivated generation, existing generation with an offer cap above top of the VRR curve, traditional demand response.
- Eligible resources must be reasonably likely to perform in the delivery years cleared.
- In subsequent years, cleared resources with multi-year commitments will be entered into the RPM potentially based on the technology-specific default gross avoidable cost minus the unit-specific projected Energy and Ancillary Services (EAS) offset.
- If the market clearing price in subsequent years is different than their original offer price of cleared multi-year resources, the resource will receive the multi-year price agreed – no higher/lower.
- Mechanism will be in place for the four BRAs corresponding to the current Quadrennial Review (2028/29 through 2031/32) and will automatically sunset

Summary

Proposed Solution Options

- Improve load forecast.
- Utilize new demand side resource products.
- In the event the system remains short, utilize reliability backstop alternative.

Other Future Potential Considerations

- Extension of cap and floor, with price adjustments
- Improvement of energy and ancillary service markets

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