Capacity Obligations for Forecasted Large Load Additions

Problem / Opportunity Statement

August 28, 2023

New data centers, and other emerging large-load industries, are driving significant forecasted load growth in certain areas of PJM. A unique aspect of such large load additions is their geographic concentration, usually within the territory of one or a small number of Load Serving Entities (LSE) within the broader zone. When the large load addition is provided to PJM by the Electric Distribution Company (EDC), the EDC can typically identify which LSE the facility is to be located.

These forecasted large load additions are leading to an issue with the appropriate assignment of capacity obligations to LSEs within a zone for future delivery years. Rather than directly assigning forecasted large load additions to the capacity obligation of the LSE where the new load will be located, under the existing process defined in the Reliability Assurance Agreement (RAA), the capacity obligation is spread across all the LSEs within the zone. This creates a misalignment in the capacity obligations and associated cost impacts of the forecasted load addition. The LSE where such an addition is forecasted to occur is not assigned the full capacity obligation and all other LSEs in the zone are assigned a portion of the capacity obligation. This issue is exacerbated when there are both RPM and FRR entities within the zone and can cause misalignment between the capacity obligations accounted for in the RPM market versus the FRR entities' obligations.

This issue warrants consideration of the PJM stakeholder process due to the increasing magnitude of forecasted load increases and potentially significant misalignment of obligations and costs among impacted LSEs. The current process has worked historically with modest load growth that is generally spread across a zone and has avoided the unnecessarily complex task of forecasting load additions for each LSE within a zone (for context, there are over 60 separate entities within the AEP zone that are allocated a capacity obligation). However, the increasing size of even a limited number of forecasted load additions justifies developing a narrow, targeted process change to properly align capacity obligations and associated costs in such instances.

While potentially significant, the impact of the issue is narrowly limited to stakeholders within a zone where such large load additions are forecasted to occur. In addition, the impact of this issue is limited in duration because once a forecasted large load addition comes online, it becomes part of the actual load and the associated capacity obligation of the applicable LSE and is no longer allocated to other LSEs within the zone. These factors also support developing a narrow, targeted process change to address the issue.