

Problem Statement

DR CP Winter Peak Load Calculation

PJM stakeholder approved Demand Response (“DR”) Capacity Performance (“CP”) winter measurement and verification enhancements that became effective 6/1/2017. The enhanced rules changed DR performance measurement in the winter from the use of a Customer Baseline to the use of the Winter Peak Load (“WPL”) and winter Firm Service Level (“FSL”) metrics. The enhancement was adopted to make measurement and verification in the summer based on Peak Load Contribution (“PLC”) and Summer Firm Service Level more consistent with measurement and verification in the winter.

The WPL is established based on the maximum hourly customer specific load during the DR required availability window on the PJM 5 winter peak days. The WPL is used for two purposes:

- 1) Establish the winter DR capacity nomination amount which is used to determine the Annual DR capacity nomination on the registration. The annual DR capacity nomination is equal to the lesser of the summer and winter capacity nomination.
- 2) Determine the winter load reduction amount during a Load Management event and test. The load reduction is determined based on the WPL minus load and adjusted for losses.

During the first year of new DR CP compliance metric (2017/2018 Delivery Year) a large customer had maintenance outage during one of the winter peak days. Since the customer had low load during one of the winter peak days the customer received a lower WPL which in turn led to a lower DR capacity nomination. An unexpectedly low DR capacity nomination resulted in the need for replacement capacity to fulfill the existing capacity commitment and avoid the daily deficiency penalty.

It was also noted that the rules for establishing a WPL do not account for add backs at the customer level in cases where the customer might have a reduced load due to economic or emergency events.

This problem statement will review existing tariff and manual language and consider making an exception for winter peak days when the customer’s load is significantly lower than usual. This situation is atypical but can have a major impact on the amount of capacity that can be nominated.