

Demand Response Capacity Performance non-summer capacity measurement CBL Process

Problem / Opportunity Statement

- The problem to be addressed, the issue to be resolved

The new Capacity Performance market rules require load reductions for capacity compliance to be determined with a customer baseline during the non-summer months. Load reductions during the summer months did not change and are still determined relative to the individual customer's PLC (Peak Load Contribution) which translates to a FSL (firm service level) approach. The new rule helps to ensure customers with low non-summer load provide load reductions during the non-summer months instead simply maintaining their typical non-summer load profile. For example, if a customer has significant AC load and their non-summer load is significantly lower than their summer load; the load reduction in the non-summer months is measured with a customer baseline that estimates the customer's non-summer load. This type of customer will need to reduce their non-summer load (no AC) when dispatched.

Prior to EPSA, PJM stakeholders at the DRS approved a proposal to change the Emergency Energy measurement and verification rules but this proposal was not advanced in the stakeholder process because it seemed apparent that EPSA would affect energy market compensation for DR resources. This proposal leveraged the economic CBL methodology instead of the current hour before methodology since it is more accurate but also recognized the balance between infrequent Load Management dispatch and level of effort required for the RRMSE test process for all DR registrations. This proposal acknowledged that the use of the current default economic CBL in the tariff (3 day type with symmetric additive adjustment) would be significantly better than the hour before method currently in place for both variable and non-variable loads and therefore not require a specific RRMSE test outcome prior to participation. The proposal did retain the ability to use an alternative CBL subject to the existing economic CBL rules that require the alternative CBL to be significantly more accurate (primarily determined by RRMSE test and approved by PJM).

The new Capacity Performance rules for DR non-summer capacity compliance were conceived prior to EPSA and expected to leverage a similar process to the proposal adopted by the DRS for the measurement of emergency energy load reductions. This would have improved the accuracy of the load reductions used for emergency energy compensation and used the same load reductions for non-summer capacity compliance.

- Why it warrants consideration in the PJM stakeholder process

The RRMSE test requirement adopted under Capacity Performance will require significant effort from market participants for little value. It requires an RRMSE test for all CP Load Management registrations prior to the Delivery Year. The RRMSE test requires 2 months of load data for a customer, every time the customer will be registered as a Load Management resource. The RRMSE test requirement was unintentional and PJM had initially expected to leverage approach adopted by the DRS to measure emergency energy load reductions for non-summer capacity compliance.

- Document if the new work is to address specific technical issues and/or to address broader policy issues

This work addresses specific technical issues, that are limited in scope, and related to the process used to determine the CBL that will be used for DR non-summer capacity compliance calculations. This effort is only focused on how to



Problem Statement

determine the CBL that will be used to determine non-summer capacity compliance and will not revisit the new Capacity Performance rule that requires a CBL to determine non-summer capacity compliance.

- Include potential additional consequences if no action is taken

If no action is taken, all CP Load Management registration will be required to perform RRMSE test prior to start of 16/17 Delivery Year. This will require members to collect two month of load data (CSPs primarily request this information from the EDCs) from all customers and systematically perform the RRMSE test. Registrations that receive an RRMSE Test score >20% will be deemed variable. Alternative CBLs may be considered for variable loads to find a more accurate CBL or ultimately PJM will assign a CBL to the registration. PJM may assign the existing tariff default CBL (3 day type with symmetric additive adjustment) which would be the same outcome as adopting this as the default CBL for Load Management registrations.