

End use customer participation in Regulation market

Problem / Opportunity Statement

Opportunity 1 (Allow more than 1 PJM member to represent end use customer in PJM markets)

The current PJM rules for End Use Customers permits a maximum two Curtailment Service Providers (one for Emergency Capacity Only and one for Economic) and 1 Energy Efficiency Resource Provider. Since the majority of Emergency registrations are Emergency Full, this means an End Use Customer may only participate with one CSP for both Emergency and Economic participation which covers all PJM markets (Energy, Capacity, DASR, SR and regulation). This means a PJM member that only focuses on providing regulation to PJM from end use customers may not be able to participate with end use customer already under contract for another wholesale service (ie: capacity) to the market.

Opportunity 2 (Allow equipment specific load data for compliance)

PJM currently requires metering and associated load data used for regulation (and ancillary service) compliance to represent the electric service for entire facility at the EDC account number level. Not all end use customer equipment is capable of providing Regulation and therefore it may be difficult to measure regulation compliance based on load data for entire facility since other uncontrolled equipment may offset the impact of the equipment which is following the regulation signal. Further, the controlled equipment at the facility may only represent a small fraction of the total facility load at the facility.

Opportunity 3 (Review and consider changes for regulation aggregation rules for participation, bids, AGC signal and compliance)

There are two applications of aggregation when providing Regulation with Load Resources: Registration aggregation and Fleet aggregation. Registration aggregation determines whether or not end use customer(s) may participate in the regulation market. The registration aggregation of load within PJM Markets requires the EDC and LSE be the same to create an aggregated resource. The aggregated resource must be able to provide at least +/- 500 KW of regulation. The Fleet aggregates all registrations of the CSP or Market Participant within a Control Zone to respond and be measured for compliance against one regulation signal. Creating an aggregated resource that meets the minimum 500 KW regulation with the same EDC and LSE impedes the creation of a viable Regulation Network as not all loads are prime candidates to provide Regulation.

Issue Source

ENBALA Power Networks – a PJM member that specializes in managing end use customer networks designed to deliver regulation to the grid.

Stakeholder Group Assignment

Create a new Demand Response Subcommittee and assign this as this Charge to such subcommittee. Where necessary, this will need to be coordinated with the Regulation Performance Senior Task Force.

Key Work Activities

- 1) Explore possibility for the creation of a new Regulation Service Provider category or multiple Economic CSPs where one CSP is responsible for regulation and the other CSP would be responsible for energy, DASR and SR.
 - Determine feasibility to manage wholesale services provided by different PJM members for same end use customer potentially at the same time and the impact on the market. This should include entire business process from registration to dispatch to measurement and verification and settlements.
- 2) Investigate the verification and compliance requirements of allowing use of load data based for specific facility equipment (“sub-metering”) for Regulation and associated market and operational impacts.
- 3) Review current aggregation rules and propose necessary changes
 - Investigate the requirement for the same EDC and LSE restrictions on aggregated loads providing Regulation.
 - i. Note: MIC may directly take up review of 500Kw threshold for participation and consider making consistent with 100kw threshold for energy participation.
 - Investigate the ability to offer Regulation at a Fleet level rather than at the Resource level
 - Investigate the requirement for Fleet restrictions to a single control zone

Expected Deliverables

- 1) Governing document changes for proposed market rule changes as appropriate.

Expected Overall Duration of Work

It is expected that this may take up to 9 months for stakeholders to complete.

Decision-making Method

The decision-making method adopted will be based on interests and proposed solutions of

stakeholders.