Automating bid duration and spacing between dispatches for Economic demand response participating in energy markets

Issue Source

Voltus, Inc. is bringing forth this issue for consideration. Voltus is a provider of Economic demand response in PJM, including in the energy market. Voltus could bring more Economic demand response to the market if offers could reflect the operational parameters of the resources, including limitations in the duration of curtailment and a need for downtime between curtailment events. Voltus also offers Economic demand response into the energy market in MISO, and has observed that in that market demand response offer parameters include minimum and maximum dispatch duration, maximum dispatch count per day, minimum time between dispatches, and minimum notification time (i.e. minutes of notice before a curtailment begins). Generators' market offers reflect their operational capabilities; as such, Economic demand response offers should also be able to as well.

Issue Content

The issue addresses a specific system limitation, wherein Economic demand response resources cannot set key operational parameters as part of price-based offers to PJM in Markets Gateway.

Key Work Activities and Scope

- Consider adding additional operating parameters to Markets Gateway and associated market clearing algorithm for Economic DR energy market offers.
- 4.2. The assigned stakeholder group will need to determine which offer parameters should be available to demand response in the energy market.
- 3. The stakeholder group will need to determine the relative level of effort to add those parameters and have them properly considered by PJM's market clearing algorithm.

Out of Scope

- 1. Load Management (Emergency and Pre-emergency Demand Response) rules, or associated rules that determine how to handle Load Management and Economic DR dispatch for the same underlying location.
 - 2.a. Any change to existing Load Management dispatch procedures and resource obligations to perform.

Expected Deliverables

- 1. Updates to Market Gateway and associated clearing algorithm software
- 4.2. Markets Gateway User Guide edits
- 2. Identify Updates to offer parameters and clearing algorithm

Corresponding PJM Tariff revisions will be developed by the appropriate committee once a solution is approved by the MIC. Conforming Manual revisions will be developed by the appropriate committee to correspond with the FERC approved Tariff revisions.

Decision-Making Method

CBIR Lite

Stakeholder Group Assignment

DISRS

Expected Duration of Work Timeline

Less than 6 months

Start Date	Priority Level	Timing	Meeting Frequency
9/13/2023	□High	☐ Immediate	☐ Weekly
	⊠ Medium	⊠ Near Term	
	□ Low	☐ Far Term	☐ Quarterly

Charter

(check one box)

	This document will serve as the Charter for a new group created by its approval.
\boxtimes	This work will be handled in an existing group with its own Charter (and applicable amendments).

More detail available in M34; Section 6