Automating bid duration for economic demand response participating in energy markets

Issue Source

Identify the external entity or internal PJM source that is bringing this issue forward for consideration. Note any important context about its origin such as this is a directive from FERC or a compliance matter.

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 demand response offers could reflect the operational parameters of demand response assets, 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, and as such demand response assets should also be able to reflect their capabilities in market offers.

Issue Content

Identify if the work is intended to address specific technical issues and/or to address broader policy issues.

The issue addresses a specific technical limitation, wherein demand response assets cannot set key operational parameters as part of market offers to PJM.

Key Work Activities and Scope

Provide a numbered list of high level work activities that the assigned stakeholder group will need to perform to accomplish its work in resolving the issue. Identify any areas of activity specifically intended and not intended to be addressed.

- 1. The assigned stakeholder group will need to determine which offer parameters should be available to demand response in the energy market.
- 2. 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.
- 3. The stakeholder group will need to update the PJM tariff and market manuals to reference the new parameters.

Expected Deliverables

Provide a numbered list of high level deliverables that the assigned stakeholder group will produce as a result of its work including analyses, reports, manual changes, governing document revisions, and FERC filings.

- 1. PJM Manual 11 edits
- 2. Tariff edits
- 3. Markets Gateway User Guide edits
- 4. Updates to offer parameters and clearing algorithm

Decision-Making Method

Identify the decision-making method adopted for this issue: Tier 1, consensus (unanimity) on a single proposal (preferred default option), or Tier 2, multiple alternatives.

Tier 1 (Voltus is open to debate about the exact set of parameters, and to a Tier 2 approach)

Stakeholder Group Assignment

Identify the existing PJM task force, subcommittee, or committee anticipated to undertake the issue in its scope of work upon approval by the parent Standing Committee, or if a new task force or subcommittee is desired along with the rationale for it.

DISRS

Expected Duration of Work Timeline

Provide an estimate of the length of time expected to resolve the issue and complete its course through the stakeholder process. Include the expected start date, the issue's priority level and timing (e.g. "immediate start") and the frequency of meetings required. Please also identify any known deadlines or key milestone dates that stakeholders should be aware.

Start Date	Priority Level	Timing	Meeting Frequency
4/17/2023	□High	⊠ Immediate	□ Weekly
	⊠ Medium	🗆 Near Term	⊠ Monthly
	□ 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