Synchronized Reserve Event Actions and Expectations

Issue Source

Issue charge being brought forth by PJM.

Issue Content

When synchronized reserves need to be deployed, PJM operators halt the approval of RT SCED cases and initiate an All-Call to members instructing them to manually increase their output to full. As a result, the Market tools for dispatching resources based on economic order are no longer utilized during a synchronized reserve event. Furthermore, with the halting of RT SCED case approvals, the following challenges and inefficiencies materialize which provide an opportunity to improve upon:

1. The pre-event RT SCED case dispatch signals and prices remain in effect, which do not reflect the verbal instructions from the PJM operator, nor do they reflect the system conditions during the synchronized reserve event.
2. New and existing transmission system constraints are not controlled, which can result in constraints being briefly violated and require manual operator intervention to correct.
3. The level of unit response is not controlled or limited by PJM in any manner. This results in a mix of over and under response across different units depending on how they respond.
4. As generators shift from following RT SCED dispatch signals to manual control, PJM experiences a slow initial recovery, followed by an extended over response.

Key Work Activities and Scope

1. Review education on existing synchronized reserve event practices and scenarios. This includes both PJM actions and expected Member actions during a synchronized reserve event.
2. Use historical examples and metrics to discuss improvements in performance and pricing during synchronized reserve events.
3. Propose solutions and timelines to enhance the overall synchronized reserve deployment process.
4. Areas in scope:
    a. Method in which PJM deploys synchronized reserves
    b. Expectations of resources during synchronized reserve events
    c. Evaluation of performance during a synchronized reserve event
5. Areas not in scope:
    a. Settlement penalty mechanism

Expected Deliverables

1. Potential changes to resource expectations during a synchronized reserve event
2. Potential manual and governing document revisions

Decision-Making Method

Tier 1, consensus

Stakeholder Group Assignment

New task force reporting to the OC with updates provided to the MIC and MC Webinar.

Expected Duration of Work Timeline

It is estimated the effort could take between 6 and 12 months. The task force would be assembled as soon as the Issue Charge is approved. Due to the rarity of reserve deployment events, timeline could be extended to gather additional data.

Start Date	Priority Level	Timing	Meeting Frequency
2/1/2021	☐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.
☐	This work will be handled in an existing group with its own Charter (and applicable amendments).

More detail available in M34; Section 6