

## SYNCHRONOUS RESERVE RESPONSE DURING EVENT DEPLOYMENT

### PROBLEM / OPPORTUNITY STATEMENT

On October 1, 2022, PJM implemented Reserve Price Formation as approved by the FERC. Among the changes was a transition to a single Synchronized Reserve product in place of the previous Tier 1 and Tier 2 Synchronized Reserve products. Included in the new Reserve Market structure is a must offer requirement applicable to all reserve eligible resources with capacity commitment. During a Synchronized Reserve Event, resources with a Synchronized Reserve commitment are penalized if they do not perform as expected during the event. PJM has observed two issues since the October 1, 2022 implementation:

- Event recovery has taken more than the PJM internal requirement of 10 minutes for the majority of Synchronized Reserve Events but less than the NERC Standard requirement of 15 minutes.
- PJM is observing a non-performance factor of approximately 49% on average for resources with a Synchronized Reserve commitment during these events.

It is important to address the observed issues above in order to maintain system reliability and compliance with NERC Standards. Of particular concern is compliance with NERC Disturbance Control Standard (DCS) as detailed in NERC Standard BAL-002-3 which requires recovery from a contingent loss within 15 minutes. PJM also has an obligation to contribute to system frequency correction when the contingent loss occurs within the PJM RTO.

As PJM continues to track performance during events and discuss non-performance concerns with the impacted resources, there is an opportunity to discuss a short-term process adjustment to help improve system reliability. This includes Identification of mitigating actions that can be added to current processes to compensate for current non-performance during Synchronous Reserve Events.

As noted above, PJM has engaged with resource owners that have not performed as expected during Synchronized Reserve Events. If these issues are not addressed, PJM will be at risk of a DCS violation which could result in fines impacting PJM Market Participants. PJM would prefer to develop and deploy short-term mitigation opportunities to avoid a potential DCS violation or reliability issue.