Synchronized Reserve Deployment <100%

Kevin Hatch

Sr. Manager, Dispatch

Reserve Certainty Sr. Task Force

April 17, 2024

Reasons to Active Synchronized Reserves

- Loss of a large unit
- Low ACE for an extended period of time
- Shared Reserves called by NPCC, and PJM cannot cover its portion by Regulation alone
- Transfer Interface Overload

Decision to Deploy Synchronized Reserves

- Evaluation of ACE, system frequency, system load, tie line schedules
  - Load increasing or decreasing
- Other units ramping on or off
- Regulation position
- Dispatchable units available
- Magnitude of unit loss (DCS)

Why the change?

- PJM Manuals (M12 4.1.2) say that we can implement partial reserve deployments now
  - We do not have a mechanism to do so
- Proposal is to move to AGC to update resource basepoints for spin deployment
  - This will provide the capability to deploy partial synchronized reserves
  - This functionality will be for future use once performance is corrected
  - PJM anticipates that future generation will be able to respond much faster

Examples of Deployment Less than 100%

- Double spinning activated
- DCS size unit trips and GD needs recovery and does not want to over compensate
- Reliability (low ACE) and GD does not need all of assigned synchronized reserves

References

- NERC BAL-002-3, Disturbance Control Standard
  - https://www.nerc.com/pa/Stand/Reliability%20Standards/BAL-002-3.pdf

Contact

Facilitator:
Lisa Morelli, Lisa.Morelli@pjm.com

Secretary:
Amanda Egan,
Amanda.Egan@pjm.com

Presenter/SME:
Kevin Hatch Kevin.Hatch@pjm.com

Synchronized Reserve Deployment <100%

Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com

PROTECT THE POWER GRID

THINK BEFORE YOU CLICK!

Be alert to malicious phishing emails.

Report suspicious email activity to PJM.

(610) 666-2244 / it_ops_ctr_shift@pjm.com