Summary of Proposed Language
for Manual 11: Energy & Ancillary Services Market Operations

Vijay Shah

Lead Engineer, Real-Time Market Operations

Markets and Reliability Committee

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- Introduced as part of 5 Minute Dispatch and Pricing problem statement

  – LMP Verification Enhancements and Clarifications

- Increase Transparency

  – Offers a more robust way to finding a suitable replacement for de-energized pricing nodes (pnodes)

- Opportunity to enhance existing Dead Bus Replacement Logic

- Required to produce LMPs for all pnodes in the PJM network model for all intervals, including de-energized pnodes
- Per M-11, automated de-energized pnode replacement logic in LPC is used to find the closest suitable live pnode for a given de-energized pnode
  - Same station, same voltage level
  - Same station, different voltage level
  - Nearest neighboring station
  - If the automated process cannot find a suitable replacement, the pnode is manually replaced as part of the LMP verification process
  - RT Market Operators also review de-energized pnodes that are automatically replaced by the engine to determine if a more optimal bus should be used

- New logic is based on Dijskstra algorithm to finding suitable replacement for de-energized pnodes

  – Uses least impedance path to find a suitable source

  – If the automated process cannot find a suitable replacement, the pnode is manually replaced as part of the LMP verification process (same to today)

  – Market Operators also review de-energized pnodes that are automatically replaced by the engine to determine if a more optimal bus should be used (same to today)

  – To be implemented in both the Day-ahead and Real-time Market Clearing Engines

- Section 2.7.2: Determination of LMPS for De-Energized Busses

  - Updated language to reflect new logic

- Section 4b.1:Overview of the Non-Synchronized Reserve Market

  - Updated to remove inaccurate language

  - Commitments for NSR assignments from dispatch run are used for settlement (not from pricing run)

- Section 10.4.1: Metered Data

  - Updated to reference correct attachment

  - Attachment C instead of D of Manual 19

	MIC	MRC
First Read	12.1.2021	12.15.2021
Endorsement	1.12.2022	1.26.2022

➢ New Dead Bus Replacement Logic & Manual revision to be effective March 1, 2022

SME/Presenter:
Vijay Shah, Vijay.Shah@pjm.com

Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com