

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

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- Introduced as part of 5 Minute Dispatch and Pricing Topics
 - 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
 - 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 Dijkstra algorithm to finding suitable replacement for de-energized pnodes
 - Uses least impedance path to find a suitable source
 - 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 to be effective March 1, 2022

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PJM Path: Treat Efforts as Separate Work Streams

