

Effective Date November 21, 2024 Impacted Manual #(s)/Manual Title(s): M-14-D: Generator Operational Requirements, Revision 66 (Periodic Review) Conforming Order(s): None **Associated Issue Tracking Title:** N/A Committee Approval Path - What committee(s) have already seen these changes? Planned committee reviews/endorsements: SOS: October 2, 2024, October 31, 2024 RSCS: October 18, 2024 (Info only) OC: October 10, 2024, November 8, 2022 (Endorsement) MRC 1st read date: October 30, 2024 MRC voting date: November 21, 2024 **Impacted Manual sections:** See detailed list below

Reason for change:

- Periodic cover-to-cover review
- References
 - Added reference to PJM Manual for Rules and Procedures for Determination of Generating Capability (M-21B)
- Section 4.3.4 Data Exchange and Management Requirements
 - Updated communication protocol for registering Phasor Measurement Units (PMU)
- Section 6.3.4 Other Requirements
 - Clarified requirement for all Generating Facilities to provide reactive capability curves to PJM prior to commercial operation
 - Clarified requirement for applicable Generating Facilities to complete reactive testing no later than 90 days after commercial operations.
- Section 7.1.1 Generator Real-Power Control
 - Added language outlining procedures for generators who lose remote control of MW output
- Section 7.1.2 Voltage and Reactive Control
 - Added language outlining procedures for generators who lose remote control of MVAR output
- Section 7.3.6 Generation Owner Periodic Tasks and Data Submittals
 - Updated the Guideline: Generation Owner Periodic Tasks and Data Submittals



- Section 7.4 Synchronization and Disconnection Procedures
 - o Added language clarifying notification procedures in the event of a relay trip
- Section 8 Wind Farm Requirements
 - Removed specific references to wind speed and wind direction to generalize to other meteorological parameters.
 - Added new Section 8.4 Wind Farm Rebuild / Repower to clarify commissioning required for wind farms that do not go through the PJM queue (no change in CIR value)
- Section 8.3.3 Real-time Operating Reserve Settlement
 - Updated language to reflect the wind backcast usage in settlements as well as the applicability of hybrid resources
- Section 9.1.1 Generator Deactivation Notice:
 - Updated information that may be posted publically
- Section 10.1 Black Start Selection Process:
 - Added note to enhance awareness that Black Start information is CEII and Member Confidential
- Section 11.1 Generator Data Confidentiality Procedures
 - Added language specifically naming cold weather operating limits in generator parameter data sharing procedures
- 12.3.3 Real-time Operating Reserve Settlement
 - Added new subsection with language to reflect the solar backcast usage in settlements as well as the applicability to hybrid resources
- 13.1 Marketing and Classification of Mixed Technology Facilities
 - Add reference to Manual 21B, Section 2.6
- Attachment D: PJM Generating Unit Reactive Capability Curve Specification and Reporting Procedures
 - o Clarified requirements and process for submitting and updating reactive capability
 - Removed reference to AVR status since it is already covered in Section 7:Generator Operations
- Attachment E, PJM Generator and Synchronous Condenser Reactive Capability Testing, Section E.2
 - Added reference to PJM Manual, 21B Rules and Procedures for Determination of Generating Capability
- Attachment N: Cold Weather Preparation Guideline and Checklist
 - Reformatted and reordered content into additional sections and sub-sections to increase readability
 - Replaced references to "generator" with either generation resource or Generating Facility where applicable
 - Added the following language taken from NERC Generating Unit Winter Weather Readiness Guideline:
 - Incorporated bulleted list of critical components, grouped by conventional generation and inverter based generation
 - Added section covering Management Roles and Expectations



- Added section focused on Evaluation of Potential Problem Areas with Critical Components
- References section updated to reflect latest industry best practices and lessons learned
- o Added footnote with link to NOAA map of locational first frost date
- Appendix A: Behind the Meter Generation Business Rules
 - o Revised to reflect current business practices
- Corrected typos, capitalization and references throughout