

Manual 14-D: Generator Operational Requirements Periodic Review

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Operating Committee
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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

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Section 8 Wind Farm Requirements

- 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)
- Attachment D: PJM Generating Unit Reactive Capability Curve Specification and Reporting Procedures
 - Clarified requirements and process for submitting and updating reactive capability curves



Changes to Attachment N: Cold Weather Preparation Guideline and Checklist

- Reformatted and reordered content into additional sections and sub-sections to increase readability
- 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



- Changes to Attachment N: Cold Weather Preparation Guideline and Checklist (continued)
 - Replaced references to "generator" with either generation resource or Generating Facility where applicable
 - References section updated to reflect latest industry best practices and lessons learned
 - Added footnote with link to NOAA map of locational first frost date

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Section 4.3.4 Data Exchange and Management Requirements

 Updated communication protocol for registering Phasor Measurement Units (PMU)

Section 7.1.1 Generator Real-Power Control

 Added language clarifying procedures for generation resources that lose remote control of MW output

Section 7.1.2 Voltage and Reactive Control

 Added language clarifying procedures for generation resources that lose remote control of MVAR output



Section 7.4 Synchronization and Disconnection Procedures

 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

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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

 Clarified language specifically naming cold weather operating limits in generator parameter data sharing procedures



- Appendix A: Behind the Meter Generation Business Rules
 - Revised multiple rules to reflect current business practices
 - Removed references to submitting changes using a template via email
 - Clarified methodology for determining Summer Net Capability for NRBTMG
 - Updated date for PJM posting NRBTMG from 11/30 to 10/31
 - Updated date PJM shall open the Coincident Peak Hours screen in the Capacity Exchange from 11/1 to 10/22
 - Clarified reporting dates associated with response to a performance compliance event

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- Changes related to Hybrid Resource Phase 2
- Section 8.3.3 Real-time Operating Reserve Settlement
 - Updated language to reflect the wind backcast usage in settlements as well as the applicability to hybrid resources
- Section 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



- Section 7.3.6 Generation Owner Periodic Tasks and Data Submittals
 - Updated the Guideline: Generation Owner Periodic Tasks and Data Submittals
 - Added task to provide data in support of Black Start RFP
 - Removed the task covering Real Time Values no longer applicable
 - Updated Temporary Parameter Limits Exceptions to align with current business rules in PJM manuals

https://www.pjm.com/~/media/documents/manuals/manual-links/m14d/go-periodic-tasks.ashx

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- Periodic cover-to-cover review
- Corrected typos, capitalization and references throughout
- References
 - Added reference to PJM Manual for Rules and Procedures for Determination of Generating Capability (M-21B)
- Section 9.1.1 Generator Deactivation Notice
 - Updated information that may be posted publically
- 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
 - Removed reference to AVR status from 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



Manual 14-D: Gen. Op. Requirements Timeline

	Committee	Sep	Oct	Nov	Dec
Manual 14-D	SOS		10/2		
Generator Operational Requirements Revision 66	OC		10/10	11/08	
	MRC			10/30	1/21
	RSCS		10/18		

- First Read
- **★** Endorsement
- O Info Only

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Periodic Review



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