

Manual 14-D Generator Operational Requirements Revision 58

Vince Stefanowicz Sr. Lead Engineer, Generation Markets & Reliability Committee November 17, 2021



Section 2.3 Generator Market Remodel

Added new section under the Responsibilities of Generation
 Owners section to detail the generator market remodel process

Section 2.4 eDART Modeling

 Added new section under the Responsibilities of Generation Owners section to describe eDART modeling requirements previously covered in section 5.3.4 eDART



Section 6.3.4 Other Requirements

 Added requirements for Generating Facilities to provide cold weather operating data prior to entering commercial operations and also following material modification affecting operating limits

Section 7.3.6 Generation Owner Periodic Tasks and Data Submittals

 Added new section and companion document with guidelines to assist Generation Owners tracking periodic tasks, testing and data submittals



Section 1.2 Generator Commercial Naming Convention

Clarified and provided additional guidance on acceptable
 Generating Facility naming

Section 7.3.1 Planned Outage

- Clarified that eDART tool is used for submitting Planned Outages
- Section 7.3.2 Maintenance Outage
 - Clarified applicability to all generation resources
- Section 7.3.5 Fuel and Emissions Reporting
 - Renamed to Fuel Emissions and Operational Data Reporting
 - Clarified requirements and necessity for responding to PJM data requests



Section 9.1 Generator Deactivation Process

- Updated language in 9.1.1, 9.1.2, & 9.1.3 to be consistent with current business practice
- Section 9.1.1 Generator Deactivation Request
 - Renamed to Generator Deactivation Notice
 - Updated Black Start resource termination requirements to reflect current Tariff requirements
- Section 9.1.2 Initial Analysis
 - Renamed to Deactivation Analysis
- Section 9.1.3 Analysis Results
 - Updated Black Start resource termination revenue impacts to reflect current Tariff requirements



Section 8 Wind Farm Requirements

- Section 8.2.1 Initial Data Requirements
 - Renamed to Data Requirements for Wind Forecast Set Up
 - Clarified language to indicate that data is required for forecasting when there is a change to a wind farm in addition to when a wind farm first comes online
- Section 8.2.3 Real Time Meteorological Tower (or mutually agreed upon alternative source)
 - Modified format of temperature unit in table to be consistent with other parameters



Section 8 Wind Farm Requirements

- Section 8.2.6 Wind Power Forecast
 - Modified names and descriptions of types of forecasts to reflect the manner in which PJM currently uses forecast products
- Section 8.3 Forecast Data Usage
 - Aligned names and descriptions of types of forecasts with changes made in 8.2.6



- Section 12.2.1 Initial Data Requirements
 - Renamed to Data Requirements for Solar Power Forecasting
 - Clarified language to indicate that data is required for forecasting when there is a change to a solar park in addition to when a solar park first comes online
 - Added language stating that solar parks with multiple components (e.g. multiple panel models) need to provide data for each component
 - Modified list to separate Maximum Facility Output (MW) from AC installed capacity of each component (MW)



- Section 12.2.2 Real Time Output
 - Added clarifying language regarding criteria that requires real-time output telemetry
 - Clarified requirements for hybrids and collocated resources to apply to all combinations of solar and other resources in addition to solar and storage resources

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- Section 12.2.3 Real Time Meteorological Tower (or mutually agreed upon alternative source)
 - Clarified that type of real-time irradiance data required is Plane of Array (POA) irradiance
 - Modified format of temperature unit in table to be consistent with other parameters
- Section 12.2.5 Solar Power Forecast
 - Modified names and descriptions of types of forecasts to reflect the manner in which PJM currently uses forecast products



- Section 12.3 Forecast Data Usage
 - Aligned names and descriptions of types of forecasts with changes made in 12.2.5

Attachment N: Cold Weather Preparation Guideline and Checklist

- Update existing links and added links to additional industry guidance for generation resource cold weather preparation
- Added recommendation to create "Emergency Freeze Protection Kits" at various plant locations

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Section 3.3 Voice Communication Requirements for Generating Entities

Removed references to ring-down phone lines to generating entities

Section 5.3.3 PJM eRPM

Renamed to PJM Capacity Exchange and removed references to eRPM

Section 5.4.4 Grid Accounting

- Replaced references to eRPM with Capacity Exchange
- Section 5.7.2.7 eRPM account
 - Renamed to Capacity Exchange account

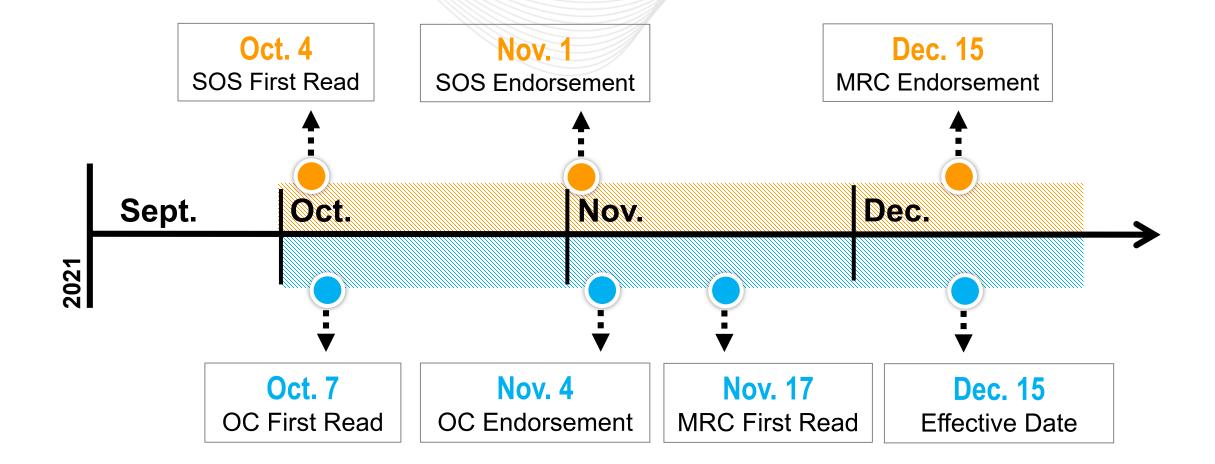


- Section 5.7.3 (Generation Transfer) Process Timeline
 - Corrected the duration of attaining PJM membership after all required paperwork has been signed and received by PJM from 60 to 90 days.

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Manual 14-D, Rev 58 Review / Approval Timeline



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Manual 14-D, Generator Operational Requirements Periodic cover to cover review



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