

<b>Effective Date</b>	10/31/2019
<b>Impacted Manual #(s)/Manual Title(s):</b>	
Manual 14-D: Generator Operational Requirements	
<b>Conforming Order(s):</b>	
Electric Storage Participation in Markets Operated by Regional Transmission Organizations and Independent System Operators (Issued February 15, 2018) Docket Nos. RM16-23-000; AD16-20-000; Order No. 841]	
<b>Associated Issue Tracking Title:</b>	Electric Storage Participation - FERC Order 841
<b>Committee Approval Path - What committee(s) have already seen these changes?</b>	
First Read 6/6/19 System Operations Subcommittee First Read 6/11/19 Operating Committee Endorsement 9/5/19 System Operations Subcommittee Endorsement 9/10/19 Operating Committee First Read 9/26/19 Markets and Reliability Committee Endorsement 10/31/19 Markets and Reliability Committee	
<b>MRC 1<sup>st</sup> read date:</b>	9/26/2019
<b>MRC voting date:</b>	10/31/2019
<b>Impacted Manual sections:</b>	
Multiple – see below	
<b>Reason for change:</b>	
Compliance with FERC Order 841: Electric Storage Resource Participation model to allow ESRs to participate in all markets where technically feasible. <b>(Bolded below)</b>  Cover to cover review	
<b>Summary of the changes:</b>	
<ul style="list-style-type: none"> <li>• Cover to cover review</li> <li>• Throughout <ul style="list-style-type: none"> <li>• Replaced references to Client Manager with Member Relations where applicable</li> <li>• Corrected typos and capitalized terms where appropriate</li> </ul> </li> <li>• <b>About this Manual</b> <ul style="list-style-type: none"> <li>• <b>Added subsection covering “Definitions and Applicability”</b></li> </ul> </li> <li>• Section 1.2 - Generator Commercial Naming Convention</li> </ul>	

- Replaced Performance Compliance with Operations Analysis and Compliance
- Section 3.2.4 - Control Center Staffing Requirements
  - Remove reference to Section 6 as it relates to training and certification requirements
- **Section 4.1.7 – SCADA—Supervisory Control and Data Acquisition**
  - Corrected typo in heading in Exhibit 6
  - **Updated Exhibit 6 to include State of Charge for Energy Storage Resources**
- **Section 4.2.3 – Metering for Individual Generators**
  - **Added metering requirement specific to Energy Storage Resources**
- Section 6.2.2 – PJM Transmission Owner (TO) Operator and Generation Dispatcher Certification
  - Corrected typo
- Section 7.1.5 – Generator Operations Under Emergency Conditions
  - Corrected typo in Exhibit 8
- **Section 7.3 – Critical Information and Reporting Requirements**
  - **Added Energy Storage Resource outage reporting requirements**
- Section 7.3.5 – Fuel and Emissions Reporting
  - Replaced references to Supplementary Status Report (SSR) with references to Resource Limitations page in Markets Gateway.
- Section 10.2.3 – Implications for Terminating Black Start Units
  - Updated to cross reference correct section – Section 9
- **Attachment D: PJM Generating Unit Reactive Capability Curve Specification and Reporting Procedures**
  - **Updated to include Energy Storage Resources**
  - Corrected references to Exhibit 13
  - **Updated stand-alone document containing D-curve examples**
- **Attachment E: PJM Generator, Energy Storage and Synchronous Condenser Reactive Capability Testing**
  - **Updated to include Energy Storage Resources**
- Attachment N: Attachment N: Cold Weather Preparation Guideline and Checklist
  - Deleted outdated link to PJM Polar Vortex Presentation at FERC Technical Conference, 4/1/14
- Appendix A – Behind the Meter Generation Business Rules
  - Added reference to Manual 13 – Emergency Operations