



# FERC Order 841: Electric Storage Participation in Markets

## Manual 40: Training and Certification Requirements

## Manual 36: System Restoration \*


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Operating Committee

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1. Can sell\* energy, Capacity, and A/S (incl. Black Start etc.)  
the resource is technically capable of providing
2. Dispatched and sets price as seller and buyer
3. Bid parameters that account for ESR characteristics
4. Min market threshold is 100 kW  = already in compliance
5. Stored MWh are billed at LMP as wholesale

\* "Eligible to provide..."

Action Required	Deadline	Who May Be Affected
Review proposed changes to Manual 40	8/6/2019	Energy Storage Resource Operators
Review proposed changes to Manual 36	8/6/2019	Energy Storage Resource Operators
		

- Manual 40 Section 3.2.4 Small Generation Plant Dispatcher
  - Updated to Small Generation Resource Dispatcher
  - Add lower MW threshold for training requirements to accommodate Energy Storage Resources
- Manual 40 Section 3.2.6 Energy Storage Device Operators
  - Updated Energy Storage Device to Energy Storage Resource (ESR)
  - Updated Manual to not assume ESRs only are participating in ancillary markets
  - Updated training requirements

- Manual 36 Attachment A: Minimum Critical Black Start Requirement
  - Updated exceptions to critical cranking power to include non-hydro energy storage resources

Committee		May	Jun	Jul	Aug	Sep	Oct
Manual 15	MIC	● 5/10	○ 6/12	★ 7/10			
	MRC				● 7/25	★ 8/22	
	MC				● 8/22	★ 9/26	
	Board						★
Manual 18 & 11	MIC		○ 6/12	★ 7/10			
	MRC				○ 7/25	★ 8/22	
Manual 27, 28 & 29	MSS		○ 6/20				
	MIC			○ 7/10	★ 8/7		
	MRC				○ 8/22	★ 9/26	
Manual 36, 40 & 14D	SOS		○ 6/6			★ 9/5	
	OC		○ 6/11			★ 9/10	
	MRC					○ 9/26	10/31 ★
Manual 36	DTS		○ 6/18				

- Information
- First Read
- ★ Endorsement

- Questions: [esr@pjm.com](mailto:esr@pjm.com)
- [Issue Tracking: Electric Storage Participation - FERC Order 841](#)