

# Manual 14-D

## Generator Operational Requirements

### Revision 51

Vince Stefanowicz  
Sr. Lead Engineer, Generation  
System Operations Subcommittee  
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# Manual 14-D, Generator Operational Requirements

|   | Committee | Jun     | Jul    | Aug    | Sep    | Oct     | Nov     | Dec    |
|---|-----------|---------|--------|--------|--------|---------|---------|--------|
| <b>Rev. 49</b><br>Non-Retail<br>Behind the<br>Meter<br>Generation | SOS       |         | ● 7/2  | ★ 7/31 |        |         |         |        |
|   | OC        | ● 6/11  |        | ★ 8/6  |        |         |         |        |
|   | MRC       |         | ● 6/27 |        |        | ★ 9/26  |         |        |
| <b>Rev. 50</b><br>Energy Storage<br>Resource<br>Participation     | SOS       | ● 6/6*  |        |        | ★ 9/5  |         |         |        |
|   | OC        | ● 6/11* |        |        | ★ 9/10 |         |         |        |
|   | MRC       |         |        |        |        | ● 9/26  | ★ 10/31 |        |
| <b>Rev. 51</b><br>DER Ride -<br>through                           | SOS       |         |        |        |        | ● 10/10 | ★ 11/7  |        |
|   | OC        |         |        |        |        | ● 10/15 | ★ 11/12 |        |
|   | RSCS      |         |        |        |        | ○ 10/18 |         |        |
|   | MRC       |         |        |        |        |         | ● 10/31 | ★ 12/5 |

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

*\*Initially presented as Rev. 49*

Voluntary guidance developed through DER Ride-through Task Force

Added in Section 7.1.1 Generator Real-Power Control

Applies to distribution-connected generators connected to radial distribution lines of voltage less than 50 kV

Directs Distributed Energy Resources to appropriate Transmission Owner Engineering & Construction Standards

- Stand alone document posted on PJM website

## 7.1 Dispatching of Generation

### 7.1.1 Generator Real-Power Control

~~The Generator~~ Generating Facilities must deliver the electric energy generated by the facility to PJM at the point(s) of interconnection in the form of 3 phase, 60-Hertz alternating current at the nominal system voltage at the point of interconnection.

~~Generators~~ Generating Facilities and their protective systems (relaying, V/Hz, etc.) should meet the frequency guidelines listed in PJM Manual M-36, System Restoration, section 2.3, to coordinate with system preservation under-frequency load shedding. Additionally, ~~generators~~ Generating Facilities and their protective systems should be capable of operation at over-frequency up to 61.7 Hz for a limited duration. Refer to NERC Reliability Standard PRC-024, Generator Frequency and Voltage Protective Relay Settings. For Generating Facilities connected to radial distribution lines of voltage less than 50 kV, refer to the ride through guidance document posted at <https://www.pjm.com/planning/design-engineering/to-tech-standards.aspx> for additional guidance.

# Manual 14-D, Rev 51 Review / Approval Timeline

