



Manual 01 Revision 39 Changes

Bilge Derin
System Operations Subcommittee
June 1, 2018

- New references to NERC Standards
 - Section 2: TOP-001, TOP-003,
 - Section 4: COM-001, COM-002,
 - Attachment B: EOP-008
- Revised sections for clarity and missing information
 - Section 1.6: Markets Gateway
 - Section 3: Synchrophasor and EMS Data Exchange
 - Attachment A: Data Specifications
- New Language
 - Section 3.2: ICCP data dump files required for PJM Members with an ICCP Connection
 - Attachment A: PAI Trigger as an optional service for generators

- Section 1: PJM Systems
 - Brief definition of PJM Systems/Tools and what they are used for
- Old Language
 - Overview of DA and RT Markets, not the tool
- New Language
 - Defining Markets Gateway and tool capabilities
 - Referring to Manual 11 for business rules

- Section 2.3.1: Transmission Monitoring Capability
 - If PJM experiences a failure of its Real-time Assessment capability for longer than 15 minutes, PJM will notify TOs.
 - TOs shall conduct a Real-time Assessment at least once every 20 min during this time. (TOP-001 R13 and TO/TOP Matrix)
- Section 2.7: PJM Member Back Up Capability
 - NERC Standard references updated.
 - TOP-003 R1, R3, R5 on data requirements.
 - TOP-001 R1 on actions to maintain the reliability of PJM TOP area.
 - TOP-001 R12 and R14 on operating within the limits of IROL and SOL.

- New language to cover DNP3 Communication Protocol.
 - PJM uses both ICCP and DNP3 to receive real-time EMS data from PJM Members.
- Bolstered the language explaining PJMnet.
- New subsection to define Jetstream system.
 - Used with DNP3 protocol to receive data from small generation assets over the internet.

- New requirement for ICCP data definition files.
 - Applies to **PJM Members with an ICCP connection** to PJM EMS.
 - ICCP dump file listing all measurements available to PJM.
 - ICCP Object ID and Measurement Description included.
 - PJM member shall provide an updated file **at least every 6 months or upon PJM's request.**

- Revised language for clarity.
- No requirement changes.
- Removed reference to Phasor Data Quality Task Force.
 - A maximum of 0.2% overall inaccuracy requirement remains.

- Per COM-001-3:
 - added Distribution Providers to the list of entities PJM has voice communications with.
 - Updated acronyms and definitions for clarity.

- Added definition for what qualifies as an “Emergency”
- Provided a table that outlines the criteria for when an emergency starts and ends.
- Highlighted the importance of three part communication during emergencies in accordance with NERC Standard COM-002.

- Table A: Generation Scheduling Services
 - Removed the references to the data submission timelines.
 - These business rules are in M11 and M14D.
- Table B: EMS Services
 - Added Performance Assessment Interval (PAI) Trigger via SCADA/ICCP.
 - This is an optional service for Generating entities.

- Reworded EOP-008-1 R5 to ensure TOs are submitting the right evidence.

Standard Reference	To be Submitted	Frequency and Date
EOP 008-1 R7	Coordinate a backup test with PJM and submit the test documentation and the results indicating the performance. Submittal to be provided via PERCS website.	(Annual) Recommend September 30

- TOs submit to submit test documentation and results, not the test itself.

- **First Read**
 - 5/9 – DMS (informational)
 - 6/1 – SOS
 - 6/5 – OC
 - 6/15 – RSCS/TTMS (informational)
 - 6/21 – MRC
- **Second Read/Endorsement**
 - 7/5 – SOS
 - 7/10 – OC
 - 7/26 – MRC

- Bilge Derin
 - Bilge.Derin@pjm.com
 - 610-666-3121