



# Manual 01 Revision 39 Changes

Bilge Derin  
Reliability Standards and  
Compliance Subcommittee  
June 15, 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

- Changes related to TOP-001 R13 and TO/TOP Matrix.
- New language in the manual:
  - PJM shall conduct a Real-time Assessment **at least once every 30 minutes**.
  - In the event that [...] PJM experiences **a failure of its Real-time Assessment capability for longer than 15 minutes**, PJM will notify TOs that they're the sole monitor for their BES.
  - TOs shall conduct a Real-time Assessment **at least once every 20 min** until PJM informs the TOs that PJM has recovered Real-time Assessment capability.



## Section 2.7 – PJM Member Back Up Capability

- NERC Standard references updated and clarified existing language.
- **TOP-003 R1, R3, R5** on data requirements to ensure PJM can perform its operational responsibilities.
  - TOs shall have back up capability to provide necessary data to PJM.
- **TOP-001 R1** on actions to maintain the reliability of PJM TOP area.
  - TOs shall have back up capability to execute actions PJM requested.
- **TOP-001 R12 and R14** on operating within the limits of IROL and SOL.
  - TOs shall have back up capability to execute actions PJM requested and have back up capability to provide IROL/SOL data to PJM.

- 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.



## Section 3.2: EMS Data Exchange

- 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.**



## Section 3.3: Synchrophasor System Data Exchange

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





## Section 4.1: Dispatch Voice and Fax Comms

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



## Section 4.5: PJM Communication Protocol

- 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.



## Attachment B: Schedule of Data Submittals

- 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 <b>the test documentation and the results indicating the performance.</b> 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



## Questions

- Bilge Derin
  - [Bilge.Derin@pjm.com](mailto:Bilge.Derin@pjm.com)
  - 610-666-3121