Manual 01 Revision 39 Changes

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Reliability Standards and Compliance Subcommittee
June 15, 2018
Overview of Changes

- 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 1.6: Markets Gateway

• 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
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.
Section 3.2: EMS Data Exchange

• 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.
Attachment A: Data Specification and Collection

• 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.

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

• TOs submit to submit test documentation and results, not the test itself.
Committee Schedule

• **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
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