



Manual 01 Revision 37 First Read

Bilge Derin
Engineer, Real-Time Data Mgmt
SOS-Joint
February 1, 2018

Section	Description
Section 2.3.1 – Transmission Monitoring Capability	New language related to the TO responsibilities per TO/TOP Matrix for TOP-010-1(i) R1, R4
Section 3.2.3 – EMS Data Exchange	Added language regarding communication of data quality issues.
Section 5.2 – System Control and Monitoring (Instantaneous data)	Clarified the definition of Tie Line to include Dynamic Transfers
Section 5.2.1 – Tie Lines	Clarified language about telemetry requirements for Tie Lines

- This was also the periodic review for Manual 01, therefore this revision contains minor changes such as grammar, formatting, updated references etc.

- New language to cover TO responsibilities related to TOP-010-1(i) R1 and R4:

PJM Member Transmission Owners shall [TOP-010-1(i) R1 and R4]:

1. Implement an **Operating Process or Operating Procedure** to address **the quality of Real-time data necessary to perform Real-time monitoring and Real-time assessments**, as appropriate.
 - This shall include **actions to address Real-time data quality issues** when data quality affects Real-time monitoring or Real-time Assessments, as appropriate.
2. Utilize their data quality indicators to **indicate the quality of Real-time data to their System Operators**,
3. Have an **alarm process monitor** that provides notification(s) to their System Operators when a failure of their Real-time monitoring alarm processor has occurred.

- New language to describe PJM and PJM Member actions when PJM detects real-time data quality issues.

If PJM encounters any **real-time data quality issues that affect real-time assessments, PJM will notify the PJM Member via email or phone call.** When notified, PJM Member shall address the data quality issue and follow the guidelines below during the data outage to communicate the data to PJM.

- Clarifying the definition of Tie Line to include Dynamic Transfers

PJM defines a Tie Line as a **physical circuit or dynamic transfer**, connecting two balancing authority areas, control areas, or fully metered electric system regions.

- Clarifying existing language to point out that the telemetry requirements apply to all types of Tie Lines

The TO is required to submit new Tie Line requests before the 1st of the month prior to the month of the requested Tie Line being energized at the PJM SOS meeting. The request should identify the primary side metering point and expected date the line is to be energized.

All required telemetry shall be available 2 weeks in advance of the Tie Line being energized.

All Tie Line ICCP Object ID changes shall be communicated to PJM two weeks in advance of change.

These requirements apply to all types of Tie Lines (External Tie Lines, Dynamic Transfers, Internal Tie Lines and Special Cases) described in this section.

- **First Read**
 - 2/1 - SOS Joint
 - 2/6 - OC
 - 2/15 - RSCS (Informational)
 - 2/22 - MRC
- **Second Read/Endorsement**
 - 3/1 - SOS Joint
 - 3/6 - OC
 - 3/22 - MRC

- Bilge Derin
 - Bilge.Derin@pjm.com
- Suzie Fahr
 - Suzie.Fahr@pjm.com

- [TOP-010-1\(i\) R1](#)
 - Each Transmission Operator shall implement an Operating Process or Operating Procedure to address the quality of the Real-time data necessary to perform its Realtime monitoring and Real-time Assessments. The Operating Process or Operating Procedure shall include:
 - 1.1. Criteria for evaluating the quality of Real-time data;
 - 1.2. Provisions to indicate the quality of Real-time data to the System Operator; and
 - 1.3. Actions to address Real-time data quality issues with the entity(ies) responsible for providing the data when data quality affects Real-time Assessments.

- [TOP-010-1\(i\) R4](#)
 - Each Transmission Operator and Balancing Authority shall have an alarm process monitor that provides notification(s) to its System Operators when a failure of its Real-time monitoring alarm processor has occurred.