

### Standard Development Roadmap

*This section is maintained by the drafting team during the development of the standard and will be removed when the standard becomes effective.*

#### Development Steps Completed:

1. Transmission Operator Certification SAR Requested — 10/7/02
2. Transmission Operator Certification SAR Authorized to Post — 11/20/02
3. SAR Drafting Team appointed — 1/6/03
4. Transmission Operator Certification SAR 1<sup>st</sup> Posting — 12/1/02 to 1/10/03
5. Transmission Operator Certification SAR 2<sup>nd</sup> Posting — 5/15/03 to 6/13/03
6. Transmission Operator Certification SAR approved by SAC to move to standard development phase — 9/8/03
7. Standard Drafting Team appointed — 9/24/03

#### Description of Current Draft:

This is the first posting of the Transmission Operator Certification Standards. These standards have been drafted based on the SARs and comments received during the first posting of the Balancing Authority Standard. The Drafting Team has modified the Certification Standard of this series to remove the process that was previously included. This removal was based on comments received. These standards are being presented in the new NERC standard format.

#### Future Development Plan:

Anticipated Actions	Anticipated Date
1. The SDT respond to comments received during initial posting and incorporate modifications based on the comments.	March 2005
2. The SDT anticipates the necessity to post this standard for a second time after receiving the comments from this initial posting.	April 2005
3. Ballot Standard	July 2005
4. BOT Adoption	October 2005

### **Definitions of Terms Used in Standard**

*This section includes all newly defined or revised terms used in the proposed standard. Terms already defined in the Reliability Standards Glossary of Terms are not repeated here. New or revised definitions listed below become approved when the proposed standard is approved. When the standard becomes effective, these defined terms will be removed from the individual standard and added to the Glossary.*

## A. Introduction

1. **Title:** Transmission Operator Certification — Data Acquisition and Monitoring
2. **Number:** TOP-012-1
3. **Purpose:** To ensure that Transmission Operators and Reliability Authorities have real-time transmission, generation, and protection and control data in order to adequately monitor the transmission system.
4. **Applicability**
  - 4.1. Transmission Operator
5. **(Proposed) Effective Date:** To be determined.

## B. Requirements

- R1. The Transmission Operator shall establish and publish its data reporting requirements for entity data submission to ensure reliability of its transmission area and to meet its Reliability Authority data reporting requirements.
  - R1.1. The data reporting requirements shall include a list of data required, periodicity of data transmittal, format for data submission, and timeframe for submission.
  - R1.2. The entity data submittal shall support:
    - R1.2.1. Real-time monitoring
    - R1.2.2. Operational planning
    - R1.2.3. Real-time assessments
- R2. The Transmission Operator shall have processes, procedures and tools for acquiring:
  - R2.1. Generation facility data, real-time operational data and generator maintenance plans from Balancing Authorities within its transmission area.
  - R2.2. Transmission facility data, real-time operational data, and maintenance and construction plans from Transmission Owners within its transmission area.
  - R2.3. System protection and control information, including special protection schemes, from the Transmission Planner in its transmission area.
  - R2.4. Generator reactive supply, status of automatic voltage regulator, and real-time operational data from Generation Operators within its transmission area.
- R3. The Transmission Operator shall have processes, procedures and tools to:
  - R3.1. Provide its Transmission Operator Area information, in real-time, to the Reliability Authority.
  - R3.2. Coordinate transmission maintenance and construction plans with the Reliability Authority.
  - R3.3. Coordinate with adjacent Transmission Operators.
- R4. The Transmission Operator shall monitor its transmission area with real-time data that includes:
  - R4.1. Frequencies.
  - R4.2. Voltages.

- R4.3. Transmission facility flows — both real and reactive.
- R4.4. Transmission facility statuses.
- R4.5. Generator MW and MVAR output.
- R4.6. Phase angles (if applicable).
- R4.7. Special protection system statuses (if applicable).
- R4.8. Equipment dynamic ratings (if applicable).
- R4.9. Transformer Load Tap Changers position (if applicable).
- R4.10. Phase shifter settings (if applicable).

**C. Measures**

- M1. The Transmission Operator shall have available for inspection its established data reporting requirements.
- M2. The Transmission Operator shall demonstrate that it can follow its process or procedure and use its data acquisition system to collect the data identified in Requirement R2.
- M3. The Transmission Operator shall demonstrate that it can provide and coordinate the elements identified in Requirement R3.
- M4. The Transmission Operator shall demonstrate that it can follow its processes, procedures, and use its tools for the elements identified in Requirement R4.

**D. Compliance**

**1. Compliance Monitoring Process**

**1.1. Compliance Monitoring Responsibility**

- 1.1.1 The Transmission Operator shall adhere to Requirements R1 through R4.

**2. Compliance Monitoring Period and Reset Timeframe**

- 2.1. None

**3. Data Retention**

- 3.1. None

**4. Additional Compliance Information**

- 4.1. None

**5. Levels of Non-Compliance**

- 5.1. Level 1: None
- 5.2. Level 2: None
- 5.3. Level 3: None
- 5.4. Level 4: None

**E. Regional Differences**

- 1. None

**Version History**

Version	Date	Action	Change Tracking