

A. Introduction

1. **Title:** **Operational Reliability Information**
2. **Number:** TOP-005-2
3. **Purpose:** To ensure reliability entities have the operating data needed to monitor system conditions within their areas.
4. **Applicability**
 - 4.1. Transmission Operators.
 - 4.2. Balancing Authorities.
 - 4.3. Purchasing Selling Entities.
5. **Proposed Effective Date:** In those jurisdictions where no regulatory approval is required, the standard shall become effective on the latter of either April 1, 2009 or the first day of the first calendar quarter, three months after BOT adoption.

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B. Requirements

- R1. As a condition of receiving data from the Interregional Security Network (ISN), each ISN data recipient shall sign the NERC Confidentiality Agreement for “Electric System Reliability Data.”
- R2. Upon request, each Balancing Authority and Transmission Operator shall provide to other Balancing Authorities and Transmission Operators with immediate responsibility for operational reliability, the operating data that are necessary to allow these Balancing Authorities and Transmission Operators to perform operational reliability assessments and to coordinate reliable operations. Balancing Authorities and Transmission Operators shall provide the types of data as listed in Attachment 1-TOP-005 “Electric System Reliability Data,” unless otherwise agreed to by the Balancing Authorities and Transmission Operators with immediate responsibility for operational reliability.
- R3. Each Purchasing-Selling Entity shall provide information as requested by its Host Balancing Authorities and Transmission Operators to enable them to conduct operational reliability assessments and coordinate reliable operations.

C. Measures

- M1. Evidence that the Balancing Authority, Transmission Operator, and Purchasing-Selling Entity is providing the information required, within the time intervals specified, and in a format agreed upon by the requesting entities.

D. Compliance

1. **Compliance Monitoring Process**
 - 1.1. **Compliance Monitoring Responsibility**

Self-Certification: Entities shall annually self-certify compliance to the measures as required by its Regional Reliability Organization.

Exception Reporting: Each Region shall report compliance and violations to NERC via the NERC compliance reporting process.

1.2. Compliance Monitoring Period and Reset Time Frame

Periodic Review: Entities will be selected for operational reviews at least every three years. One calendar year without a violation from the time of the violation.

1.3. Data Retention

Not specified.

1.4. Additional Compliance Information

Not specified.

2. Violation Severity Levels:

R#	Lower	Moderate	High	Severe
R1	N/A	N/A	N/A	The ISN data recipient failed to sign the NERC Confidentiality Agreement for “Electric System Reliability Data”.
R2	The responsible entity failed to provide any of the data requested by other Balancing Authorities or Transmission Operators.	N/A	N/A	The responsible entity failed to provide all of the data requested by its host Balancing Authority or Transmission Operator.
R3	The responsible entity failed to provide any of the data requested by other Balancing Authorities or Transmission Operators.	N/A	N/A	The responsible entity failed to provide all of the data requested by its host Balancing Authority or Transmission Operator.

E. Regional Variances

None identified.

Version History

Version	Date	Action	Change Tracking
0	April 1, 2005	Effective Date	New
0	August 8, 2005	Removed “Proposed” from Effective Date	Errata
1		Removed the Reliability Coordinator from the list of responsible functional entities Deleted R1 and R1.1 Modified M1 to omit the reference to the Reliability Coordinator Deleted VSLs for R1 and R1.1	Revised
2	March 17, 2011	Order issued by FERC approving TOP-005-2 (approval effective 5/23/11)	

Attachment 1-TOP-005

Electric System Reliability Data

This Attachment lists the types of data that Balancing Authorities, and Transmission Operators are expected to share with other Balancing Authorities and Transmission Operators.

- 1.** The following information shall be updated at least every ten minutes:
 - 1.1.** Transmission data. Transmission data for all Interconnections plus all other facilities considered key, from a reliability standpoint:
 - 1.1.1** Status.
 - 1.1.2** MW or ampere loadings.
 - 1.1.3** MVA capability.
 - 1.1.4** Transformer tap and phase angle settings.
 - 1.1.5** Key voltages.
 - 1.2.** Generator data.
 - 1.2.1** Status.
 - 1.2.2** MW and MVAR capability.
 - 1.2.3** MW and MVAR net output.
 - 1.2.4** Status of automatic voltage control facilities.
 - 1.3.** Operating reserve.
 - 1.3.1** MW reserve available within ten minutes.
 - 1.4.** Balancing Authority demand.
 - 1.4.1** Instantaneous.
 - 1.5.** Interchange.
 - 1.5.1** Instantaneous actual interchange with each Balancing Authority.
 - 1.5.2** Current Interchange Schedules with each Balancing Authority by individual Interchange Transaction, including Interchange identifiers, and reserve responsibilities.
 - 1.5.3** Interchange Schedules for the next 24 hours.
 - 1.6.** Area Control Error and frequency.
 - 1.6.1** Instantaneous area control error.
 - 1.6.2** Clock hour area control error.
 - 1.6.3** System frequency at one or more locations in the Balancing Authority.
- 2.** Other operating information updated as soon as available.
 - 2.1.** Interconnection Reliability Operating Limits and System Operating Limits in effect.
 - 2.2.** Forecast of operating reserve at peak, and time of peak for current day and next day.
 - 2.3.** Forecast peak demand for current day and next day.
 - 2.4.** Forecast changes in equipment status.

- 2.5. New facilities in place.
- 2.6. New or degraded special protection systems.
- 2.7. Emergency operating procedures in effect.
- 2.8. Severe weather, fire, or earthquake.
- 2.9. Multi-site sabotage.