

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. SAR version 1 posted on May 15, 2007.
2. SAR version 1 comment period closed on June 13, 2007.
3. SAR version 2 posted on August 7, 2007.
4. SAR version 2 comment period closed on September 7, 2007.
5. SAR approved by SC on November 1, 2007.
6. First posting of revised standards on October 7, 2008.

Proposed Action Plan and Description of Current Draft:

The SDT began meeting in January 2008 following the approval of the SAR by the SC. The schedule shows completion of the project in 3Q09. The current draft is the second posting of the revised standards. As part of the proposed revisions, TOP-005-1, TOP-006-1, TOP-007-0, and TOP-008-0, and PER-001-0 will be retired. The requirements in those standards have been eliminated or moved to other standards within this project. Some changes made in this project are dependent on corresponding changes to Project 2006-06, Reliability Coordination, being approved.

Future Development Plan:

Anticipated Actions	Anticipated Date
1. Post for ballot.	July 2009
2. Post for re-ballot.	September 2009
3. Submit to BOT.	September 2009
4. Submit to regulatory authorities for approval.	October 2009

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.

There are no new or revised definitions proposed in this standard revision.

A. Introduction

1. **Title:** Coordination of Transmission Operations

2. **Number:** TOP-001-2

3. **Purpose:**

To ensure coordination between and among ~~functional~~reliability entities for the reliability of the Bulk Electric System (BES).

4. **Applicability**

4.1. Balancing Authorities

4.2. Transmission Operators

4.3. Generator Operators

4.4. Distribution Providers

4.5. Load-Serving Entities

5. **Effective Date:** All requirements become effective the first day of the first calendar quarter twenty-four months following applicable regulatory approval. In those jurisdictions where no regulatory approval is required, the requirements become effective the first day of the first calendar quarter twenty-four months following Board of Trustees adoption.

B. Requirements

R1. Each Balancing Authority, Distribution Provider, Load-Serving Entity, and Generator Operator shall comply with each reliability directives issued by the Transmission Operator, unless the respective entity informs the Transmission Operator that such actions would violate safety, equipment, regulatory or statutory requirements. *[Violation Risk Factor: High] [Time Horizon: Operations Planning, Same-day Operations, Real-Time Operations]*

R2. Each Transmission Operator shall inform its Reliability Coordinator and affected Transmission Operators of ~~Real-Time or~~ actual and anticipated Emergency conditions; ~~including potential impacts caused by disconnections prior to switching~~. *[Violation Risk Factor: High] [Time Horizon: Same-day Operations, Real-Time Operations]*

R3. Each Transmission Operator, ~~Balancing Authority, and Generator Operator~~, shall render emergency assistance to others Transmission Operators, as requested and available, unless such actions would violate safety, equipment, regulatory or statutory requirements. *[Violation Risk Factor: High] [Time Horizon: Real-Time Operations]*

R4. Each Transmission Operator and Generator Operator shall coordinate its respective operations known or expected to ~~affect~~have a reliability impact on other reliability entities with those entities unless ~~System~~ conditions do not permit such coordination. *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same-day Operations, Real-Time Operations]*

R5. Each Transmission Operator shall inform its Reliability Coordinator of actions being taken to return the system to within limits when an IROL or SOL has been exceeded. *[Violation Risk Factor: Medium] [Time Horizon: Real-Time Operations]*

R6. The Transmission Operator shall act or direct others to act, to mitigate the magnitude and duration of exceeding an IROL within the IROL's T_v . [*Violation Risk Factor: High*] [*Time Horizon: Real-time Operations*]

~~R7. Each Transmission Operator shall operate the Bulk Electric System to the most limiting parameter when there is a difference in derived operating limits amongst reliability entities. [*Violation Risk Factor: Medium*] [*Time Horizon: Real-time Operations*]~~

C. Measures

M1. The Balancing Authority, Distribution Provider, Load-Serving Entity, and Generator Operator shall each make available upon request, in accordance with Requirement R1, evidence that it either: (a) complied with each reliability directives issued by the Transmission Operator or, (b) informed the Transmission Operator that such actions would violate safety, equipment, regulatory, or statutory requirements. Such evidence could include, but is not limited to, dated operator logs, voice recordings or transcripts of voice recordings, electronic communications, or other equivalent evidence in electronic or hard copy format.

M2. The Transmission Operator shall make available upon request, evidence that it has informed its Reliability Coordinator and affected Transmission Operators of ~~Real-Time or actual and~~ anticipated Emergency conditions, ~~including potential impacts caused by disconnections prior to switching,~~ in accordance with Requirement R2. Such evidence could include, but is not limited to, dated operator logs, voice recordings or transcripts of voice recordings, electronic communications, or other equivalent evidence in electronic or hard copy format.

M3. The Transmission Operator, ~~Balancing Authority, and Generator Operator~~ shall each make available upon request, evidence that requested and available emergency assistance was rendered to others: Transmission Operators in accordance with Requirement R3 unless such actions would violate safety, equipment, regulatory, or statutory requirements. Such evidence could include, but is not limited to, dated operator logs, voice recordings or transcripts of voice recordings, electronic communications, or other equivalent evidence in electronic or hard copy format.

M4. The Transmission Operator and Generator Operator shall each make available upon request, evidence that operations were coordinated among ~~affected~~impacted reliability entities in accordance with Requirement R4 unless ~~System~~ conditions do not permit such coordination. Such evidence could include, but is not limited to, operator logs, voice recordings or transcripts of voice recordings, electronic communications, or other equivalent evidence.

M5. The Transmission Operator shall make available evidence that it has informed its Reliability Coordinator of actions being taken to return the system to within limits when an IROL or SOL has been exceeded in accordance with Requirement R5. Such evidence could include but is not limited to dated operator logs, voice recordings or transcripts of voice recordings, or dated computer printouts.

M6. The Transmission Operator shall make available evidence of when it acted or directed others to mitigate the magnitude and duration of exceeding an IROL within the IROL's T_v in accordance with Requirement R6. Such evidence could include but is not limited

to dated operator logs, voice recordings or transcripts of voice recordings, or dated computer printouts.

~~M7. The Transmission Operator shall make available evidence such as dated operator logs, voice recordings or transcripts of voice recordings, or dated computer printouts, of any occasion when it operated to a limiting parameter due to differing operating limits amongst reliability entities in accordance with Requirement R7.~~

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Enforcement Authority

Regional Entity

1.2. Compliance Monitoring and Reset Time Frame

Not applicable.

1.3. Compliance Monitoring and Enforcement Processes

Compliance Audits

Self-Certifications

Spot Checking

Compliance Violation Investigations

Self-Reporting

Complaints

1.4. Data Retention

The Balancing Authority, Transmission Operator, Distribution Provider, Load-Serving Entity, and Generator Operator shall each keep data or evidence to show compliance ~~as identified below~~ for each applicable Requirement and Measure for the current calendar year and one previous calendar year unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation:

- ~~• The Balancing Authority, Distribution Provider, Load-Serving Entity, and Generator Operator shall each retain for the current calendar year and one previous calendar year, in accordance with Requirement R1 and Measurement M1, evidence that it either: (a) complied with reliability directives issued by the Transmission Operator or, (b) informed the Transmission Operator that such actions would violate safety, equipment, regulatory, or statutory requirements.~~
- ~~• The Transmission Operator shall retain evidence for the current calendar year and one previous calendar year that it has informed its Reliability Coordinator and affected Transmission Operators of Real-Time or anticipated Emergency conditions in accordance with Requirement R2 and Measurement M2.~~

- ~~•The Transmission Operator, Balancing Authority, and Generator Operator shall retain evidence for the current calendar year and one previous calendar year that requested and available emergency assistance was rendered to others in accordance with Requirement R3 and Measurement M3 unless such actions would violate safety, equipment, regulatory, or statutory requirements.~~
- ~~•The Transmission Operator and Generator Operator shall retain evidence for the current calendar year and one previous calendar year that operations known or expected to affect other Reliability Entities were coordinated among affected Reliability Entities in accordance with Requirement R4 and Measurement M4 unless System conditions do not permit such coordination.~~
- ~~•The Transmission Operator shall make available evidence for three calendar years that it has informed its Reliability Coordinator of actions being taken to return the System to within limits when an IROL or SOL has been exceeded in accordance with Requirement R5 and Measurement M5.~~
- ~~•The Transmission Operator shall make available evidence of when it acted, or directed others to act, to mitigate the magnitude and duration of exceeding an IROL within the IROL's T_r in accordance with Requirement R6 and Measurement M6.~~
- ~~•The Transmission Operator shall retain evidence for the current calendar year and one previous calendar year of any occasion when it operated to a limiting parameter due to differing operating limits amongst reliability entities in accordance with Requirement R7 and Measurement M7.~~

If a Balancing Authority, Transmission Operator, Distribution Provider, Load-Serving Entity, or Generator Operator is found non-compliant, it shall keep information related to the non-compliance until found compliant.

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

1.5. Additional Compliance Information

None.

2. Violation Severity Levels

	Lower	Moderate	High	Severe
R1	The Balancing Authority, Distribution Provider, Load-Serving Entity, or Generator Operator did not comply with reliability directives issued by the Transmission Operator, unless the respective entity informed the Transmission Operator that such actions would violate safety, equipment, regulatory, or statutory requirements on one occasion. <u>N/A</u>	The Balancing Authority, Distribution Provider, Load-Serving Entity, or Generator Operator did not comply with reliability directives issued by the Transmission Operator, unless the respective entity informed the Transmission Operator that such actions would violate safety, equipment, regulatory, or statutory requirements on two occasions. <u>N/A</u>	The Balancing Authority, Distribution Provider, Load-Serving Entity, or Generator Operator did not comply with reliability directives issued by the Transmission Operator, unless the respective entity informed the Transmission Operator that such actions would violate safety, equipment, regulatory, or statutory requirements on three occasions. <u>N/A</u>	The Balancing Authority, Distribution Provider, Load-Serving Entity, or Generator Operator did not comply with <u>a</u> reliability directives issued by the Transmission Operator, unless <u>and</u> the respective entity <u>did not</u> informed the Transmission Operator that such actions would violate safety, equipment, regulatory, or statutory requirements on four or more occasions.
R2	The Transmission Operator did not inform its Reliability Coordinator and affected Transmission Operators of real-time or actual and <u>anticipated</u> Emergency conditions on one occasion.	The Transmission Operator did not inform its Reliability Coordinator and affected Transmission Operators of real-time or actual and <u>anticipated</u> Emergency conditions on two occasions.	The Transmission Operator did not inform its Reliability Coordinator and affected Transmission Operators of real-time or actual and <u>anticipated</u> Emergency conditions on three occasions.	The Transmission Operator did not inform its Reliability Coordinator and affected Transmission Operators of real-time or actual and <u>anticipated</u> Emergency conditions on four or more occasions.
R3	N/A	N/A	N/A	The Transmission Operator; Balancing Authority, or Generator Operator did not render emergency assistance to others <u>Transmission Operators</u> , as requested and available, unless <u>and</u> such

	Lower	Moderate	High	Severe
				actions would <u>not</u> violate safety, equipment, regulatory, or statutory requirements.
R4	The Transmission Operator or Generator Operator did not coordinate their respective operations known or expected to <u>affect</u> <u>impact</u> other reliability entities with one affected reliability entity or 25% or less of the affected reliability entities unless System conditions did not permit such coordination.	The Transmission Operator or Generator Operator did not coordinate their respective operations known or expected to <u>affect</u> <u>impact</u> other reliability entities with two affected reliability entities or more than 25% or less than or equal to 50% of the affected reliability entities unless System conditions did not permit such coordination.	The Transmission Operator or Generator Operator did not coordinate their respective operations known or expected to <u>affect</u> <u>impact</u> other reliability entities with three affected reliability entities or more than 50% or less than or equal to 75% of the affected reliability entities unless System conditions did not permit such coordination.	The Transmission Operator or Generator Operator did not coordinate their respective operations known or expected to <u>affect</u> <u>impact</u> other reliability entities with four or more affected entities or more than 75% of the affected entities unless System conditions did not permit such coordination.
R5	The Transmission Operator did not make available evidence that it had informed its Reliability Coordinator of actions being taken to return the system to within limits when an IROL or SOL has been exceeded on one occasion.	The Transmission Operator did not make available evidence that it had informed its Reliability Coordinator of actions being taken to return the system to within limits when an IROL or SOL has been exceeded on two occasions.	The Transmission Operator did not make available evidence that it had informed its Reliability Coordinator of actions being taken to return the system to within limits when an IROL or SOL has been exceeded on three occasions.	The Transmission Operator did not make available evidence that it had informed its Reliability Coordinator of actions being taken to return the system to within limits when an IROL or SOL has been exceeded on four or more occasions.
R6	The Transmission Operator did not make available evidence of <u>its actions</u> the timing of when it acted , or <u>when it</u> directed others to act, to mitigate the magnitude and	The Transmission Operator did not make available evidence of <u>its actions</u> the timing of when it acted , or <u>when it</u> directed others to act, to mitigate the magnitude and	The Transmission Operator did not make available evidence of <u>its actions</u> the timing of when it acted , or <u>when it</u> directed others to act, to mitigate the magnitude and	The Transmission Operator did not make available evidence of <u>its actions</u> the timing of when it acted , or <u>when it</u> directed others to act, to mitigate the magnitude and

	Lower	Moderate	High	Severe
	duration of exceeding an IROL within the IROL's T_v on one occasion.	duration of exceeding an IROL within the IROL's T_v on two occasions.	duration of exceeding an IROL within the IROL's T_v on three occasions.	duration of exceeding an IROL within the IROL's T_v on four or more occasions.
R7	The Transmission Operator did not operate the BES to the most limiting parameter when there was a difference in derived operating limits amongst reliability entities on one occasion.	The Transmission Operator did not operate the BES to the most limiting parameter when there was a difference in derived operating limits amongst reliability entities on two occasions.	The Transmission Operator did not operate the BES to the most limiting parameter when there was a difference in derived operating limits amongst reliability entities on three occasions.	The Transmission Operator did not operate the BES to the most limiting parameter when there was a difference in derived operating limits amongst reliability entities on four or more occasions.

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	November 1, 2006	Adopted by Board of Trustees	Revised
2	TBD	Revisions pursuant to Project 2007-03	Revised