# **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. Draft SAR Version 1 posted January 15, 2007
- 2. Draft SAR Version 1 Comment Period ended February 14, 2007
- 3. Draft SAR Version 2 and comment responses on SAR version 1 posted March 19, 2007
- 4. Draft Version 2 SAR comment period ended April 17, 2007
- 5. SAR version 2 and comment responses for SAR version 2 accepted by SC and SDT appointed in June 2007.
- <u>6. First posting of revised standards on August 5, 2008 with comment period closed on September 16, 2008.</u>
- 7. Draft Version 2of standards and response to comments September 16, 2008–May 26, 2009.
- 8. Second posting of revised standards on July 10, 2009 with comment period closed on August 9, 2009.
- 9. RC SDT coordinated with OPCP SDT and RTO SDT on definitions relating to directives and three part communication and Draft Version 3 of standards and response to comments August 9–November 20, 2009.
- 10. Third posting of revised standards on January 4, 2010 with comment period closed on February 3, 2010.
- 11. Initial Ballot conducted February 25 through March 7, 2011.

#### **Proposed Action Plan and Description of Current Draft:**

The SDT began working on revisions to the standards in August 2007. Following the initial ballot the project was subdivided with some standards moving forward ahead of others. Proposed modifications to IRO-001 were subdivided into two phases – with the first phase the recommended retirement of Requirement R7 as a conforming change associated with approval of IRO-014-2. IRO-001-3 is the second phase and includes more extensive edits to the standard. The current posting contains revisions based on stakeholder comments on the initial ballot. The team is posting for a successive ballot.

#### **Future Development Plan:**

Anticipated Actions	Anticipated Date
1. Post Standards for a successive ballot.	January-February 2012
2. Respond to comments on Successive ballot	March - April 2012
3. Standards posted for recirculation ballot	May 2012
4. Standards to be sent to BOT for approval.	<u>June 2012</u>
5. Standards filed with regulatory authorities.	<u>August 2012</u>

#### **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.

The RC SDT proposes the following new definition:

Reliability Directive: A communication initiated by a Reliability Coordinator, Transmission Operator or Balancing Authority where action by the recipient is necessary to address an Emergency or Adverse Reliability Impact.

This defined term is contained in draft COM-002-3 and IRO-001-3.

As a reference, we have included the existing definition of Emergency and the BOT approved definition of Adverse Reliability Impact<sup>1</sup>:

Emergency: Any abnormal system condition that requires automatic or immediate manual action to prevent or limit the failure of transmission facilities or generation supply that could adversely affect the reliability of the Bulk Electric System.

Adverse Reliability Impact: The impact of an event that results in Bulk Electric System instability or Cascading.

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<sup>&</sup>lt;sup>1</sup> This definition was approved by the NERC Board of Trustees on August 4, 2011. Filing with regulatory authorities is pending.

#### A. Introduction

1. Title: Reliability Coordination — Responsibilities and Authorities

2. Number: IRO-001-23

- 3. Purpose: Reliability Coordinators must have the authority, plans, and agreements in place to immediately direct reliability entities within their Reliability Coordinator Areas to re-dispatch generation, reconfigure transmission, or reduce load to mitigate critical conditions to return the system to a reliable state. If a Reliability Coordinator delegates tasks to others, the Reliability Coordinator retains its responsibilities for complying with NERC and regional standards. Standards of conduct are necessary to ensure the Reliability Coordinator does not act in a manner that favors one market participant over another.
- 3. Purpose: To establish the authority of Reliability Coordinators to direct other entities to prevent an Emergency or Adverse Reliability Impacts to the Bulk Electric System.

## 4. Applicability

- **4.1.** Reliability Coordinators. Coordinator
- 4.2. Regional Reliability Organizations.
- 4.3.4.2. Transmission Operator-
- **4.4.4.3.** Balancing Authorities. Authority
- **4.5.4.4.** Generator Operators. Operator
- 4.6. Transmission Service Providers.
- 4.7. Load Serving Entities.
- 4.8. Purchasing Selling Entities.
- 5. Effective Date:
  - **4.5.** Distribution Provider
- 5. Effective Date: In those jurisdictions where regulatory approval is required, this standard shall become effective on the first day of the second calendar quarter after applicable regulatory approval. In those jurisdictions where no regulatory approval is required, this standard shall become effective on the first day of the first calendar quarter after Board of Trustees approval.

#### **B. Requirements**

- **R1.** Each Regional Reliability Organization, subregion, or interregional coordinating group shall establish one or more Reliability Coordinators to continuously assess transmission reliability and coordinate emergency operations among the operating entities within the region and across the regional boundaries.
- **R2.** The Reliability Coordinator shall comply with a regional reliability plan approved by the NERC Operating Committee.
- R3. The Reliability Coordinator shall have elear decision making the authority to act and toor direct actions to be taken by Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load Serving Entities, and Purchasing Selling Entities within its Reliability Coordinator Area to preserve the integrity and reliability of the

Bulk Electric System. These actions shall be taken without delay, but no longer than 30 minutes.

- R4.R1. Reliability Coordinators that delegate tasks to other entities shall have formal operating agreements with each entity to others to act (which tasks are delegated. The Reliability Coordinator shall verify that all delegated tasks are understood, communicated, and addressed within its Reliability Coordinator Area. All responsibilities for complying with NERC and regional standards applicable to Reliability Coordinators shall remain with the Reliability Coordinator.could include issuing Reliability Directives) to prevent identified events or mitigate the magnitude or duration of actual events that result in an Emergency or Adverse Reliability Impacts. [Violation Risk Factor: High][Time Horizon: Real-time Operations, Same Day Operations and Operations Planning]
- **R5.** The Reliability Coordinator shall list within its reliability plan all entities to which the Reliability Coordinator has delegated required tasks.
- **R6.** The Reliability Coordinator shall verify that all delegated tasks are carried out by NERC certified Reliability Coordinator operating personnel.
- R7.R2. Each Transmission Operators Operator, Balancing Authorities Authority,
  Generator Operators, Transmission Service Providers, Load Serving Entities, and Purchasing-Selling Entities Operator, Distribution Provider shall comply with Reliability Coordinator directivesits Reliability Coordinator's direction unless compliance with the direction cannot be physically implemented or unless such actions would violate safety, equipment, or regulatory or statutory requirements. Under these circumstances, the Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load Serving Entity, or Purchasing Selling Entity shall immediately inform the Reliability Coordinator of the inability to perform the directive so that the Reliability Coordinator may implement alternate remedial actions. [Violation Risk Factor: High] [Time Horizon: Real-time Operations, Same Day Operations and Operations Planning]
- **R8.** The Reliability Coordinator shall act in the interests of reliability for the overall Reliability Coordinator Area and the Interconnection before the interests of any other entity.

#### C. Measures

- M1. Each Regional Reliability Organization shall have, and provide upon request, evidence that could include, but is not limited to signed agreements or other equivalent evidence that will be used to confirm that it established one or more Reliability Coordinators to continuously assess transmission reliability and coordinate emergency operations among the operating entities within the region and across the regional boundaries as described in Requirement 1.
- M2. Each Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, job descriptions, signed agreements, an authority letter signed by an officer of the company, or other equivalent evidence that will be used to confirm that the Reliability Coordinator has the authority to act as described in Requirement 3.
- M3. The Reliability Coordinator shall have and provide upon request current formal operating agreements with entities that have been delegated any Reliability Coordinator tasks (Requirement 4 Part 1).
- M4. The Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, job descriptions, signed agreements, records of training sessions, monitoring procedures or other equivalent evidence that will be used to confirm that all delegated tasks are understood, communicated, and addressed within its Reliability Coordinator Area (Requirement 4 Part 2 and Requirement 5).

- M5. The Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, records that show each operating person assigned to perform a Reliability Coordinator delegated task has a NERC Reliability Coordinator certification credential, or equivalent evidence confirming that delegated tasks were carried out by NERC certified Reliability Coordinator operating personnel, as specified in Requirement 6.
- R3. Each Transmission Operator, Balancing Authority, Generator Operator, Transmission
  Service and Distribution Provider, Load Serving Entity, or Purchasing Selling Entity shall inform its Reliability Coordinator upon recognition of its inability to perform as directed in accordance with Requirement R2. [Violation Risk Factor: High] [Time Horizon: Real-time Operations, Same Day Operations and Operations Planning]

#### C. Measures

- M1. Each Reliability Coordinator shall have and provide upon request evidence that couldwhich may include, but is not limited to, dated operator logs, dated records, dated and time-stamped voice recordings or dated transcripts of voice recordings, electronic communications, or equivalent documentation, that will be used to determine that it has the authority to take action or direct action, which could have included issuing Reliability Directive(s), to prevent identified events or mitigate the magnitude or duration of actual events that caused Adverse Reliability Impacts within its Reliability Coordinator Area. (R1)
- M2. Each Transmission Operator, Balancing Authority, Generator Operator, and Distribution
  Provider shall have and provide evidence which may include, but is not limited to dated
  operator logs, dated records, dated and time-stamped voice recordings or dated transcripts of
  voice recordings, electronic communications, or other equivalent evidencedocumentation,
  that will be used to confirmdetermine that it did complycomplied with theits Reliability
  Coordinator's directives, direction(s) unless the direction could not be implemented or if
  forsuch actions would have violated safety, equipment, regulatory or statutory requirements
  it could not comply, In such cases, the Transmission Operator, Balancing Authority,
  Generator Operator, or Distribution Provider shall have and provide copies of the safety,
  equipment, regulatory or statutory requirements as evidence for not complying with the
  Reliability Coordinator's direction. (R2)
- M6.M3. Each Transmission Operator, Balancing Authority, Generator Operator, and Distribution Provider shall have and provide evidence which may include, but is not limited to dated operator logs, dated records, dated and time-stamped voice recordings or dated transcripts of voice recordings, electronic communications, or equivalent documentation, that will be used to determine that it informed the Reliability Coordinator immediately. (of its inability to perform as directed in accordance with Requirement 7) R3. (R3)

#### D. Compliance

- 1. Compliance Monitoring Process
  - 1.1. Compliance Monitoring Responsibility Enforcement Authority

NERC shall be responsible For entities that do not work for compliance monitoring of the Regional Reliability Organization.

<u>Entity</u>, the Regional Reliability Organizations Entity shall be responsible for compliance monitoring of serve as the Compliance Enforcement Authority.

<u>For Reliability Coordinators, Transmission Operators, Generator Operators, Distribution Providers, and Load Serving Entities.</u>

# 1.2. Compliance Monitoring Period and Reset Time Frame

One or more of the following methods will be used to assess compliance:

- Self certification (Conducted annually with submission according to schedule.)
- Spot Check Audits (Conducted anytime with up to 30 days notice given to prepare.)
- Periodic Audit (Conducted once every three years according to schedule.)
- Triggered Investigations (Notification of an investigation must be made within 60 days of an event or complaint of noncompliance. The entity will have up to 30 days to prepare for that work for their Regional Entity, the investigation. An entity may request an extension of the preparation period and the extension will be considered ERO or a Regional Entity approved by the ERO and FERC or other applicable governmental authorities shall serve as the Compliance Monitor on a case by case basis.) Enforcement Authority.

The Performance-Reset Period shall be 12 months from the last finding of non-compliance.

## 1.2. Compliance Monitoring and Enforcement Processes:

**Compliance Audit** 

**Self-Certification** 

**Spot Checking** 

**Compliance Violation Investigation** 

**Self-Reporting** 

**Complaint** 

#### 1.3. Data Retention

Each Regional Reliability The following evidence retention periods identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit.

The Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, or Distribution Provider shall keep data or evidence to show compliance as identified below unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation:

- <u>o</u> The Electric reliability Organization shall have retain its current, in-force document evidence for 5 calendar years for Requirement R1, Measure 1M1.
- <u>EachThe</u> Reliability Coordinator shall have its current, in force documents or the latest copy of a record as evidence of compliance to Measures 2 through 6. retain its evidence for the most recent 90 calendar days for voice recordings or 12 months for documentation for Requirement R2, Measure M2.

<u>EachThe</u> Transmission Operator, <u>Balancing Authority</u>, Generator Operator, <u>Transmission Serviceor Distribution</u> Provider, and <u>Load Serving Entity</u> shall <u>keep 90 days of historical data (retain its</u> evidence) for <u>Measure 6the most recent 90 calendar days for voice recordings or 12 calendar months for documentation for Requirements R3 and R4, Measures M3 and M4.</u>

If an entity is a Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, or Distribution Provider is found non-compliant the entity, it shall keep information related to the noncompliance until found compliant or for two years plus the current year, whichever is longer.

- Evidence used as part of a triggered investigation shall be retained by the entity being investigated for one year from the date that the investigation is closed, as determined notified by the Compliance Monitor, Enforcement Authority that the evidence is no longer needed.
- The Compliance Monitor Enforcement Authority shall keep the last periodic audit reportrecords and all requested and submitted subsequent compliance audit records.
- 1.4. Additional Compliance Information

None.

# 2. Violation Severity Levels:

R#	Lower VSL	Moderate VSL	High VSL	Severe VSL
R1	- N/A	N/A	N/A	N/A
<del>R2.</del>	N/A	N/A	N/A	The Reliability Coordinator did not comply with the regional reliability plan approved by the NERC Operating Committee.
<del>R3.</del>	N/A N/A		The Reliability Coordinator cannot demonstrate that it has clear authority to act or direct actions to preserve transmission security and reliability of the Bulk Electric System.	The Reliability Coordinator failed to take or direct action to preserve the reliability and security of the Bulk Electric System within 30 minutes of identifying those actions.
<del>R4.</del>	The Reliability Coordinator has delegated tasks to other entities and had formal operating agreements with each of these entities but could not verify that delegated tasks were understood, communicated, and addressed within its Reliability Coordinator Area.			The Reliability Coordinator has delegated tasks to other entities but failed to have a formal operating agreement delegating tasks to each of these entities.
<del>R5.</del>	5% or less of the delegate entities are not identified in the reliability plan.  More than 5% up to (and including) 10% of the delegate entities are not identified in the reliability plan.		More than 10% up to (and including) 15% of the delegate entities are not identified in the reliability plan.	There is no reliability plan  OR  More than 15% of the delegate entities are not identified in the reliability plan.
<del>R6.</del> <u>F</u>	There is no reliability plan OR More than 15% of the delegate entities are not identified in the	The Reliability Coordinator failed to demonstrate that more than 5 up to (and including) 10% of its delegated tasks were being performed by NERC certified		demonstratetake action or direct actions, to prevent an identified event that more

R-#	ŧ	Lower VSL	Moderate VSL	High VSL	Severe VSL
		reliability plan.N/A	Reliability Coordinator operating personnel N/A	Reliability Coordinator Operating personnel. N/A	certifiedresulted in an Adverse Reliability Impact.  OR  The Reliability Coordinator operating personnelfailed to take action or direct actions to mitigate the magnitude or duration of an event that resulted in an Adverse Reliability Impact.
<del>R8.</del> <u>F</u>	22	N/A	The responsible entity could not comply with a directive due to qualified reasons (violation of safety, equipment or regulatory or statutory requirements) and did not immediately inform the Reliability Coordinator. N/A	N/AN/A The responsible entity initiated the action directed by the RC, but failed to fully comply with the RC's directive.	The responsible entity did not followcomply with the Reliability Coordinator's directive.
<del>R9.</del> <u>F</u>	<u>R3</u>	N/A	N/A	N/A	The responsible entity failed to inform its Reliability Coordinator did not act in the interestsupon recognition of reliability for the overall Reliability Coordinator Area and the Interconnection before the interests of one or more other entitiesits inability to perform as directed.

# E. Regional Differences 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
1	November 19, 2006April 4, 2007	Changes "Distribution Provider" to "Transmission Service Provider" Approved by FERC — Effective Date	ErrataNew
1	May 19, 2011	Replaced Levels of Noncompliance with FERC-approved VSLs	VSL Order
2	To be determined	Retired Requirement R7 to eliminate redundancy with IRO-014-2, Requirement R1.	Project 2006-06
<u>3</u>	TBD	Revised in accordance with SAR for project 2006-6, Reliability Coordination; Revised the standard and retired six requirements (R2, R4, R5, R6, and R8).	Project 2006-06