

## 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.
6. First posting of revised standards on August 5, 2008 with comment period closed on September 16, 2008.
7. Draft Version 2 of 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 18, 2010.
11. The fourth draft of the standards was posted for a comment period with an Initial Ballot that ended on March 7, 2011.

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

The SDT began working on revisions to the standards in August 2007. The current posting is for the recirculation ballot. The initial ballot was conducted as a single vote for a set of standards and their associated implementation plans and definitions. Following the initial ballot the Standards Committee authorized the team to separate the standards and post the standards that have achieved consensus for individual recirculation ballots. This is the fifth posting of this standard.

### Future Development Plan:

Anticipated Actions	Anticipated Date
1. Standards posted for recirculation ballots.	July 2011
2. Standards sent to BOT for approval.	August 2011
3. Standards filed with regulatory authorities.	September 2011

### 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.*

~~None~~ The RC SDT proposes the following modified definition:

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

## A. Introduction

1. **Title:** Coordination Among Reliability Coordinators
2. **Number:** IRO-014-2
3. **Purpose:** To ensure that each Reliability Coordinator's operations are coordinated such that they will not have an Adverse Reliability Impact on other Reliability Coordinator Areas and to preserve the reliability benefits of interconnected operations.
4. **Applicability:**
  - 4.1. Reliability Coordinators.
5. **Effective Date:** In those jurisdictions where regulatory approval is required, this standard shall become effective on the first day of the first calendar quarter that is 12 months 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 that is 12 months after Board of Trustees approval.

## B. Requirements

- R1. Each Reliability Coordinator shall have Operating Procedures, Operating Processes, or Operating Plans for activities that require notification, exchange of information or coordination of actions that may impact other Reliability Coordinator Areas to support Interconnection reliability. These Operating Procedures, Processes, or Plans shall collectively address the following: *[Violation Risk Factor: Medium] [Time Horizon: Same Day Operations and Operations Planning]*
  - 1.1. Communications and notifications, including the mutually agreed to conditions under which one Reliability Coordinator notifies other Reliability Coordinators; the process to follow in making those notifications; and the data and information to be exchanged with other Reliability Coordinators.
  - 1.2. Energy and capacity shortages.
  - 1.3. Planned or unplanned outage information.
  - 1.4. Control of voltage, including the coordination of reactive resources.
  - 1.5. Coordination of information exchange to support reliability assessments.
  - 1.6. Authority to act to prevent and mitigate system conditions which could cause Adverse Reliability Impacts to other Reliability Coordinator Areas.
  - 1.7. Weekly conference calls
- R2. Each Reliability Coordinator shall maintain its Operating Procedures, Operating Processes, or Operating Plans identified in Requirement R1 as follows: *[Violation Risk Factor: Lower] [Time Horizon: Same Day Operations and Operations Planning]*
  - 2.1. Review and update annually with no more that 15 months between reviews.
  - 2.2. Obtain written agreement from all of the Reliability Coordinators required to take the indicated action(s) for each update.

- 2.3.** Distribute to all Reliability Coordinators that are required to take the indicated action(s) within 30 days of an update.
- R3.** Each Reliability Coordinator shall make notifications and exchange reliability-related information with other Reliability Coordinators in accordance with the Operating Procedures, Operating Processes, or Operating Plans identified in Requirement R1. *[Violation Risk Factor: Medium][Time Horizon: Real-time Operations and Operations Planning]*
- R4.** Each Reliability Coordinator shall participate in agreed upon conference calls, at least weekly (per Requirement 1, Part 1.7) with other Reliability Coordinators within the same Interconnection. *[Violation Risk Factor: Lower][Time Horizon: Real-time Operations]*
- R5.** Each Reliability Coordinator, upon identification of an Adverse Reliability Impact, shall notify all other Reliability Coordinators. *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]*
- R6.** During each instance where Reliability Coordinators disagree on the existence of an Adverse Reliability Impact each impacted Reliability Coordinator shall operate as though the problem exists. *[Violation Risk Factor: High] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]*
- R7.** During those instances where Reliability Coordinators disagree on the existence of an Adverse Reliability Impact, the Reliability Coordinator that identified the Adverse Reliability Impact shall develop an action plan to resolve the Adverse Reliability Impact. *[Violation Risk Factor: High][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]*
- R8.** ~~When a Reliability Coordinator has identified an Adverse Reliability Impact and the other~~ During those instances where Reliability Coordinators disagree on ~~an action plan~~ the existence of an Adverse Reliability Impact, each Reliability Coordinator shall implement the action plan developed by the Reliability Coordinator that identified the Adverse Reliability Impact unless such actions would violate safety, equipment, regulatory or statutory requirements. *[Violation Risk Factor: High][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]*

### C. Measures

- M1.** Each Reliability Coordinator shall have available the latest approved documented version of its Operating Procedures, Processes, and Operating Plans that require notifications, information exchange or the coordination of actions among impacted Reliability Coordinators for conditions or activities that impact other Reliability Coordinator Areas. This documentation shall include dated, current in force documentation with the specified elements. (R1)
- M2.** Each Reliability Coordinator shall have dated evidence that the Operating Procedures, Processes, and Plans that require one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) were:
- 2.1** Reviewed and updated annually with no more than 15 months between reviews.

**2.2** Agreed to, in writing, by all the Reliability Coordinators required to take the indicated action(s).

**2.3** Distributed within 30 days of an update to all Reliability Coordinators that are required to take the indicated action(s).

This evidence may include, but is not limited to dated documentation with confirmation of receipt, dated notice of acceptance or agreement to take specified actions, or dated electronic communications with confirmation of receipt and acceptance or agreement to take specified actions. (R2)

**M3.** Each Reliability Coordinator shall have and provide evidence which may include, but is not limited to operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent dated documentation, that will be used to determine that it made notifications and exchanged reliability-related information with impacted Reliability Coordinators in accordance with the Operating Procedures, Processes, or Plans identified in Requirement R1. (R3)

**M4.** Each Reliability Coordinator shall have and provide evidence which may include, but is not limited to operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent dated documentation, that will be used to determine that it participated in agreed upon (at least weekly) conference calls with other Reliability Coordinators within the same Interconnection. (R4)

**M5.** Each Reliability Coordinator shall have and provide evidence which may include, but is not limited to operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent dated documentation, that will be used to determine that it, upon identification of an Adverse Reliability Impact, notified ~~impacted~~other Reliability Coordinators. (R5)

**M6.** Each Reliability Coordinator shall have and provide evidence which may include, but is not limited to operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent documentation, that will be used to determine that it operated under the assumption that the Adverse Reliability Impact existed during each instance where Reliability Coordinators disagreed on the existence of an Adverse Reliability Impact. (R6)

**M7.** Each Reliability Coordinator that identified an Adverse Reliability Impact shall have evidence and provide evidence that it developed an action plan during those instances where Reliability Coordinators disagreed on the existence of an Adverse Reliability Impact. This evidence may include, but is not limited to operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent dated documentation. (R7)

**M8.** Each impacted Reliability Coordinator shall have and provide evidence which may include, but is not limited to operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent dated documentation, that will be used to determine that it implemented the action plan developed by the Reliability Coordinator who has the identified the Adverse Reliability Impact when a Reliability Coordinator has identified an Adverse Reliability Impact and the impacted Reliability

Coordinators disagree on an action unless such actions would have violated safety, equipment, or regulatory or statutory requirements. (R8)

## D. Compliance

### 1. Compliance Monitoring Process

#### 1.1. Compliance Enforcement Authority

~~Regional Entity~~The Regional Entity is the Compliance Enforcement Authority except where the Reliability Coordinator works for the Regional Entity. Where the Reliability Coordinator works for the Regional Entity, the Regional Entity will establish an agreement with the ERO or another entity approved by the ERO and FERC (i.e. another Regional Entity), to be responsible for compliance enforcement.

#### 1.2. Compliance Monitoring Period and Reset Time Frame

Not Applicable

#### 1.3. Compliance Monitoring and Enforcement Processes:

Compliance Audits~~s~~

Self-Certifications~~s~~

Spot Checking

Compliance Violation Investigations~~s~~

Self-Reporting

Complaints~~s~~

#### 1.4. Data Retention

The Reliability Coordinator 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:

- Each Reliability Coordinator shall retain its current, in force document and any documents in force since the last compliance audit for Requirements R1, R2, and Measures M1, M2.
- Each Reliability Coordinator shall retain its most recent 12 months of evidence for Requirement R3, R4, R5 and Measure M3, M4, M5.
- Each Reliability Coordinator shall retain 3 calendar years plus current calendar year of evidence for Requirements R6 through R8 and Measures M6 through M8.
- If a Reliability Coordinator is found non-compliant, it shall keep information related to the non-compliance until found compliant, or for the time period specified above, whichever is longer.
- The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

**2. Violation Severity Levels**

R#	Lower VSL	Moderate VSL	High VSL	Severe VSL
R1	The Reliability Coordinator has Operating Procedures, Operating Processes, or Operating Plans in place for activities that require notification, exchange of information or coordination of actions with impacted Reliability Coordinators to support Interconnection reliability but failed to address one of the topical areas identified in Parts 1.1 through 1.7.	The Reliability Coordinator has Operating Procedures, Operating Processes, or Operating Plans in place for activities that require notification, exchange of information or coordination of actions with impacted Reliability Coordinators to support Interconnection reliability but failed to address two of the topical areas identified in Parts 1.1 through 1.7.	The Reliability Coordinator has Operating Procedures, Operating Processes, or Operating Plans in place for activities that require notification, exchange of information or coordination of actions with impacted Reliability Coordinators to support Interconnection reliability but failed to address three of the topical areas identified in Parts 1.1 through 1.7.	The Reliability Coordinator failed to have Operating Procedures, Operating Processes, or Operating Plans in place for activities that require notification, exchange of information or coordination of actions with impacted Reliability Coordinators to support Interconnection reliability to address three or more of the topical areas identified in Parts 1.1 through 1.7.
R2	N/A	The Reliability Coordinator Operating Procedures, Operating Processes, or Operating Plans identified in R1 but failed to distribute these to all Reliability Coordinators that are required to take action.	The Reliability Coordinator has Operating Procedures, Operating Processes, or Operating Plans identified in R1 but failed to obtain agreement from all Reliability Coordinators that are required to take action.  OR Failed to review and update the Operating Procedures, Operating Processes, and Operating Plans identified in R1 annually.	The Reliability Coordinator has Operating Procedures, Operating Processes, or Operating Plans identified in R1 but failed to review and update annually and obtain written agreement from all Reliability Coordinators that are required to take action and failed to distribute these to all Reliability Coordinators that are required to take action.
R3	N/A	N/A	The Reliability Coordinator failed to make notifications OR exchange reliability-related information with impacted Reliability Coordinators.	The Reliability Coordinator failed to make notifications AND exchange reliability-related information with impacted Reliability Coordinators.

R#	Lower VSL	Moderate VSL	High VSL	Severe VSL
R4	N/A	N/A	N/A	The Reliability Coordinator failed to participate in an agreed upon (at least weekly) conference call with impacted Reliability Coordinators within the same Interconnection.
R5	N/A	The Reliability Coordinator failed to notify one, but not all, of the impacted Reliability Coordinators upon identification of an Adverse Reliability Impact.	N/A	The Reliability Coordinator failed to notify more than one impacted Reliability Coordinators upon identification of an Adverse Reliability Impact.  OR The Reliability Coordinator failed to notify the impacted Reliability Coordinator (when there is only one impacted Reliability Coordinator) upon identification of an Adverse Reliability Impact.
R6	N/A	N/A	N/A	The Reliability Coordinator failed to operate under the assumption that the Adverse Reliability Impact existed during an instance where Reliability Coordinators disagree on the existence of an Adverse Reliability Impact.
R7	N/A	N/A	N/A	The Reliability Coordinator that identified the Adverse Reliability Impact failed to develop an action plan to resolve the Adverse Reliability Impact during an instance where Reliability Coordinators disagreed on the existence of an Adverse Reliability

R#	Lower VSL	Moderate VSL	High VSL	Severe VSL
				Impact.
R8	N/A	N/A	N/A	<p>The Reliability Coordinator failed to implement the action plan developed by the Reliability Coordinator that identified the Adverse Reliability Impact <del>when a Reliability Coordinator has identified an Adverse Reliability Impact and the impacted</del><u>during an instance where Reliability Coordinators disagreed on <del>an action plan</del> the existence of an Adverse Reliability Impact.</u></p>

**E. Regional Differences**

None identified.

**F. Associated Documents**

**Version History**

Version	Date	Action	Change Tracking
1	August 10, 2005	<ol style="list-style-type: none"> <li>1. Changed incorrect use of certain hyphens (-) to “en dash (-).”</li> <li>2. Hyphenated “30-day” when used as adjective.</li> <li>3. Changed standard header to be consistent with standard “Title.”</li> <li>4. Initial capped heading “Definitions of Terms Used in Standard.”</li> <li>5. Added “periods” to items where appropriate.</li> <li>6. Changed “Timeframe” to “Time Frame” in item D, 1.2.</li> <li>7. Lower cased all words that are not “defined” terms — drafting team, self-certification.</li> <li>8. Changed apostrophes to “smart” symbols.</li> <li>9. Added comma in all word strings “Procedures, Processes, or Plans,” etc.</li> <li>10. Added hyphens to “Reliability Coordinator-to-Reliability Coordinator” where used as adjective.</li> <li>11. Removed comma in item 2.1.2.</li> <li>12. Removed extra spaces between words where appropriate.</li> </ol>	January 20, 2006
1	February 7, 2006	Approved by BOT	Revised
1	April 4, 2007	Regulatory Approval — Effective Date	New
2	TBD	Revised per <del>SAR for</del> Project 2006-6, <del>RC SDT</del> ; <u>Revised existing requirements for clarity, retired R3 and R4 and incorporated requirements from IRO-015-1 and IRO-016-1 into this standard.</u>	Revised