

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 3, 2010.

Proposed Action Plan and Description of Current Draft:

The SDT began working on revisions to the standards in August 2007. The current posting contains revisions based on stakeholder comments on the ~~second~~third draft. The team is ~~seeking comments on the revised standards~~posting for a 30 day pre-ballot review.

Future Development Plan:

Anticipated Actions	Anticipated Date
1. Respond to comments on third posting	March 2010
2. Post Standards for pre-ballot period.	April 2010 <u>January 2011</u>
3. Standards posted for initial and recirculation ballots.	May 2010 <u>February 2011</u>
4. Standards sent to BOT for approval.	July 2010 <u>April 2011</u>

5. Standards filed with regulatory authorities.

~~September 2010~~June 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

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. ~~For conditions or activities that impact other Reliability Coordinator Areas,~~ Each Reliability Coordinator shall have Operating Procedures, Operating Processes, or Operating Plans for activities that require notification, exchange of information or coordination of actions ~~with impacted~~that may impact other Reliability ~~Coordinators~~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's~~Coordinator shall maintain its Operating ~~Procedure,~~ ~~Process~~Procedures, Operating Processes, or Plan that requires one or more other Reliability Coordinators ~~to take action (e.g., make notifications, exchange information, or coordinate actions)~~ shall be Operating Plans identified in Requirement R1 as follows:

[Violation Risk Factor: Lower] [Time Horizon: Same Day Operations and Operations Planning]

2.1. Agreed to by all Review and update annually with no more than 15 months between reviews.

~~2.1.2.2.~~ Obtain written agreement from all of the Reliability Coordinators required to take the indicated action(s) for each update.

~~2.2.2.3.~~ ~~Distributed~~ Distribute to all Reliability Coordinators that are required to take the indicated action(s) within 30 days of an update.

- R3. ~~For conditions or activities that impact other Reliability Coordinator Areas.~~ Each Reliability Coordinator shall make notifications and exchange reliability-related information with impacted other Reliability Coordinators using its predefined in accordance with the Operating Procedures, Operating Processes, or Operating Plans for conditions that may impact other Reliability Coordinator Areas or other means to accomplish the notifications and exchange of reliability-related information 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, and (per Requirement 1, Part 1.7) with other communication forums with impacted 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 impacted 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 when the identified Adverse Reliability Impact cannot be agreed to by the impacted Reliability Coordinators. *[Violation Risk Factor: Medium/High] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]*
- R7. ~~The~~ During those instances where Reliability Coordinators disagree on the existence of an Adverse Reliability Impact, the Reliability Coordinator with the that identified the Adverse Reliability Impact shall develop a mitigation action plan when the impacted Reliability Coordinators can not agree that to resolve the problem exists Adverse Reliability Impact. *[Violation Risk Factor: Medium/High][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]*
- R8. ~~Each impacted~~ When a Reliability Coordinator has identified an Adverse Reliability Impact and the other Reliability Coordinators disagree on an action plan, each Reliability Coordinator shall implement the mitigation action plan developed by the Reliability Coordinator who has the that identified Adverse Reliability Impact when the impacted Adverse Reliability Coordinators can not agree on a mitigation plan Impact unless such actions would violate safety, equipment, or regulatory or statutory

requirements. [Violation Risk Factor: ~~Medium~~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, ~~or~~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 ~~may~~shall include, ~~but is not limited to,~~ dated, current in force documentation with the specified elements. (R1)

M2. Each Reliability Coordinator shall have dated evidence that the Operating Procedures, Processes, ~~or~~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.

~~2.12.2~~ Agreed to, in writing, by all the Reliability Coordinators required to take the indicated action(s).

~~2.22.3~~ 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 ~~document~~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 dated operator logs, dated and timestamped voice recordings or dated 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 ~~using its predefined in accordance with the~~ Operating Procedures, Processes, or Plans ~~for conditions or activities that impact other Reliability Coordinator Areas or other means to accomplish the notifications and exchange of reliability related information identified in Requirement R1~~. (R3)

M4. Each Reliability Coordinator shall have and provide evidence which may include, but is not limited to dated operator logs, dated and timestamped voice recordings or dated 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 ~~and with~~ other ~~communication forums with impacted~~ Reliability Coordinators within the same Interconnection. (R4)

M5. Each Reliability Coordinator shall have and provide evidence which may include, but is not limited to dated operator logs, dated and timestamped voice recordings or dated 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 Reliability Coordinators. (R5)

- M6.** Each Reliability Coordinator shall have and provide evidence which may include, but is not limited to dated operator logs, dated and timestamped voice recordings or dated transcripts of voice recordings, electronic communications, or equivalent dated documentation, that will be used to determine that it operated ~~as though~~under the ~~problem exists when~~assumption that the ~~identified~~ Adverse Reliability Impact ~~was not agreed to by the impacted~~existed during each instance where Reliability Coordinators ~~disagreed on the existence of an Adverse Reliability Impact~~. (R6)
- M7.** Each Reliability Coordinator ~~with the~~that identified an Adverse Reliability Impact shall have evidence and provide evidence that it developed ~~a mitigation~~an action plan ~~when the impacted during those instances where~~ Reliability Coordinators ~~could not agree that the problem exists~~disagreed on the existence of an Adverse Reliability Impact. This evidence may include, but is not limited to dated operator logs, dated and timestamped voice recordings or dated 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 dated operator logs, dated and timestamped voice recordings or dated transcripts of voice recordings, electronic communications, or equivalent dated documentation, that will be used to determine that it implemented the ~~mitigation~~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 ~~can not agree~~disagree on ~~a mitigation plan~~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

1.2. Compliance Monitoring Period 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 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:

- o Each Reliability Coordinator shall retain its current, in force document and any documents in force since the last compliance audit for ~~all~~ Requirements R1, R2, and Measures M1, M2.
- o Each Reliability Coordinator shall retain its most recent 12 months of evidence for Requirement R3, R4, R5 and Measure M3, M4, M5.
- o Each Reliability Coordinator shall retain 3 calendar years plus current calendar year of evidence for Requirements R6 through R8 and Measures M6 through M8.
- o 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.
- o 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	<p>The Reliability Coordinator has Operating Procedures, <u>Operating</u> Processes, or <u>Operating</u> 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 or two of the parts of the topical areas identified in Parts 1.1 through 1.7.</p>	<p>The Reliability Coordinator has Operating Procedures, <u>Operating</u> Processes, or <u>Operating</u> 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 or four <u>two</u> of the part <u>topical areas identified in Parts 1.1 through 1.7.</u></p>	<p>The Reliability Coordinator has Operating Procedures, <u>Operating</u> Processes, or <u>Operating</u> 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 five <u>three</u> of the part <u>topical areas identified in Parts 1.1 through 1.7.</u></p>	<p>The Reliability Coordinator failed to have Operating Procedures, <u>Operating</u> Processes, or <u>Operating</u> 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.</p>
R2	N/A	<p>The Reliability Coordinator failed to have evidence that the Operating Procedures, <u>Operating</u> Processes, or <u>Operating</u> Plans that require one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) were identified in R1 but failed to distributed these to all Reliability Coordinators that are required to take action.</p>	<p>The Reliability Coordinator failed to have evidence that the <u>has</u> Operating Procedures, <u>Operating</u> Processes, or <u>Operating</u> Plans that require one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) were agreed to <u>by identified in R1 but failed to obtain agreement from</u> all Reliability Coordinators that are required to take action.</p> <p><u>OR</u></p> <p><u>Failed to review and update the Operating Procedures, Operating Processes, and Operating Plans identified in R1 annually.</u></p>	<p>The Reliability Coordinator failed to have evidence that the <u>has</u> Operating Procedures, <u>Operating</u> Processes, or <u>Operating</u> Plans that require one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) were agreed to <u>by identified in R1 but failed to review and update annually and obtain written agreement from</u> all Reliability Coordinators that are required to take action and were distributed <u>failed to distribute these</u> to all Reliability Coordinators that are required to take action.</p>

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R#	Lower VSL	Moderate VSL	High VSL	Severe VSL
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.
R4	N/A	N/A	N/A	The Reliability Coordinator failed to participate in an agreed upon (at least weekly) conference call or other communication forum with impacted Reliability Coordinators <u>within the same Interconnection.</u>
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 any <u>more than one</u> impacted Reliability Coordinators upon identification of an Adverse Reliability Impact. <u>OR</u> <u>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.</u>
R6	N/A	N/A	N/A	The Reliability Coordinator failed to operate as though <u>under</u> the problem existed when <u>assumption</u> that the identified -Adverse Reliability Impact was not agreed to by the impacted <u>existed</u> during an instance where Reliability Coordinators.

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R#	Lower VSL	Moderate VSL	High VSL	Severe VSL
				disagree on the existence of an Adverse Reliability Impact.
R7	N/A	N/A	N/A	The Reliability Coordinator with the that identified the Adverse Reliability Impact failed to develop a mitigation an action plan when to resolve the impacted Adverse Reliability Impact during an instance where Reliability Coordinators can not agree that disagreed on the problem exists existence of an Adverse Reliability Impact.
R8	N/A	N/A	N/A	The impacted Reliability Coordinator failed to implement the mitigation action plan developed by the Reliability Coordinator who has the that identified the Adverse Reliability Impact when a Reliability Coordinator has identified an Adverse Reliability Impact and the impacted Reliability Coordinators could not agree disagree on a mitigation an

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R#	Lower VSL	Moderate VSL	High VSL	Severe VSL
				<u>action</u> plan -

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"> 1. Changed incorrect use of certain hyphens (-) to “en dash (-).” 2. Hyphenated “30-day” when used as adjective. 3. Changed standard header to be consistent with standard “Title.” 4. Initial capped heading “Definitions of Terms Used in Standard.” 5. Added “periods” to items where appropriate. 6. Changed “Timeframe” to “Time Frame” in item D, 1.2. 7. Lower cased all words that are not “defined” terms — drafting team, self-certification. 8. Changed apostrophes to “smart” symbols. 9. Added comma in all word strings “Procedures, Processes, or Plans,” etc. 10. Added hyphens to “Reliability Coordinator-to-Reliability Coordinator” where used as adjective. 11. Removed comma in item 2.1.2. 12. Removed extra spaces between words where appropriate. 	January 20, 2006
1	February 7, 2006	Approved by BOT	Revised
1	April 4, 2007	Regulatory Approval — Effective Date	New
2	TBD	Revised per SAR for Project 2006-6, RC SDT	Revised