Implementation Plan for IRO-014-2 — Coordination Among Reliability Coordinators

Prerequisite Approvals

- None required

Conforming Changes to Requirements in Already Approved Standards

- IRO-001-2 — Reliability Coordination — Responsibilities and Authorities

- IRO-015-1 — Notifications and Information Exchange Between Reliability Coordinators

- IRO-016-1 — Coordination of Real-time Activities between Reliability Coordinators

Revision Summary

The Reliability Coordination SDT (RC SDT) revised the standard and is proposing retiring two requirements (R3 and R4). New requirements were brought into this standard from IRO-015-1 (R1-R2) and IRO-016-1 (R1 and its sub requirements). Changes were made to eliminate redundancies between standards (existing and proposed), eliminate administrative items, align with NERCs Rules of Procedure and to address issues in FERC Order 693.

Functions that Must Comply with the Requirements in the Standard:

- Reliability Coordinator

Effective Dates

To be determined.

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.

Revisions or Retirements to Already Approved Standards

The following tables identify the sections of approved standards that shall be retired or revised when this standard is implemented. If the drafting team is recommending the retirement or revision of a requirement, that text is blue.

Already Approved Standard	Proposed Replacement Requirement(s)
IRO-001-2 **R7.** The Reliability Coordinator shall have clear, comprehensive coordination agreements with adjacent Reliability Coordinators to ensure that System Operating Limit or Interconnection Reliability Operating Limit violation mitigation requiring actions in adjacent Reliability Coordinator Areas are coordinated.	**IRO-014-2** **R1.** For conditions or activities that impact other Reliability Coordinator Areas, e~~The~~ Each Reliability Coordinator shall have Operating Procedures, Processes, or Plans for activities that require notification, exchange of information or coordination of actions with impacted Reliability Coordinators to support Interconnection reliability. These Operating Procedures, Processes, or Plans shall collectively address~~, as a minimum,~~ the following: *[Violation Risk Factor: Medium] [Time Horizon: Same Day Operations and Operations Planning]* ~~R1.1.~~**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. ~~R1.2.~~**1.2.** Energy and capacity shortages. ~~R1.3.~~**1.3.** Planned or unplanned outage information. ~~R1.4.~~**1.4.** Control of ~~V~~voltage ~~control~~, including the coordination of reactive resources for voltage control. ~~R1.5.~~**1.5.** Coordination of information exchange to support reliability assessments. ~~R1.6.~~**1.6.** Authority to act to prevent and mitigate conditions which could ~~instances of~~ caus~~ing~~e Adverse Reliability Impacts to other Reliability Coordinator Areas.
Notes: The RC_SDT proposes retiring R7 as it is redundant with IRO-014, R1.	

Already Approved Standard	Proposed Replacement Requirement(s)
IRO-014-1 **R1.** The Reliability Coordinator shall have Operating Procedures, Processes, or Plans in place for activities that require notification, exchange of information or coordination of actions with one or more other Reliability Coordinators to support Interconnection reliability. These Operating Procedures, Processes, or Plans shall address Scenarios that affect other Reliability Coordinator Areas as well as those developed in coordination with other Reliability Coordinators. *[Violation Risk Factor: Medium]* **R1.1** These Operating Procedures, Processes, or Plans shall collectively address, as a minimum, the following: [Violation Risk Factor: Lower] **R1.1.1** Communications and notifications, including the conditions1 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. [Violation Risk Factor: Medium] **R1.1.2** Energy and capacity shortages. [Violation Risk Factor: Medium] **R1.1.3** Planned or unplanned outage information. [Violation Risk Factor: Medium] **R1.1.4** Voltage control, including the coordination of reactive resources for voltage control. [Violation Risk Factor: Medium] **R1.1.5** Coordination of information exchange to support reliability assessments. [Violation Risk Factor: Lower] **R1.1.6** Authority to act to prevent and mitigate instances of causing Adverse Reliability Impacts to other Reliability Coordinator Areas. [Violation Risk Factor: Lower]	**IRO-14-2** **R1.** For conditions or activities that impact other Reliability Coordinator Areas, e~~The~~ Each Reliability Coordinator shall have Operating Procedures, Processes, or Plans ~~in place~~ for activities that require notification, exchange of information or coordination of actions with impacted ~~with one or more other~~ Reliability Coordinators to support Interconnection reliability. ~~These Operating Procedures, Processes, or Plans shall address Scenarios that affect other Reliability Coordinator Areas as well as those developed in coordination with other Reliability Coordinators.~~ These Operating Procedures, Processes, or Plans shall collectively address the following: *[Violation Risk Factor: Medium]* *[Time Horizon: Same Day Operations and Operations Planning]* ~~**R1.1** These Operating Procedures, Processes, or Plans shall collectively address, as a minimum, the following: *[Violation Risk Factor: Lower]*~~ **R1.**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. *[Violation Risk Factor: Medium]* **R1.**1.2 Energy and capacity shortages. *[Violation Risk Factor: Medium]* **R1.**1.3 Planned or unplanned outage information. *[Violation Risk Factor: Medium]* **R1.**1.4 Control of V~~v~~oltage ~~control~~, including the coordination of reactive resources for voltage control. *[Violation Risk Factor: Medium]* **R1.**1.5 Coordination of information exchange to support reliability assessments. *[Violation Risk Factor: Lower]* **R1.**1.6 Authority to act to prevent and mitigate instances of causing Adverse Reliability Impacts to other Reliability Coordinator Areas. *[Violation Risk Factor: Lower]*

Notes:
Revise R1 as shown and delete the footnote.

1 Examples of conditions when one Reliability Coordinator may need to notify another Reliability Coordinator may include (but aren't limited to) sabotage events, Interconnection Reliability Operating Limit violations, voltage reductions, insufficient resources, arming of special protection systems, etc.

Already Approved Standard	Proposed Replacement Requirement(s)
IRO-014-1 **R2.** Each Reliability Coordinator's Operating Procedure, Process, or Plan that requires one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) shall be: **R2.1.** Agreed to by all the Reliability Coordinators required to take the indicated action(s). **R2.2.** Distributed to all Reliability Coordinators that are required to take the indicated action(s).	**IRO-014-2** **R2.** Each Reliability Coordinator's Operating Procedure, Process, or Plan that requires one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) shall be: *[Violation Risk Factor: Lower] [Time Horizon: Same Day ~~Real-time~~ Operations ~~Planning~~ and ~~Operations~~ Long-term Planning]* ~~R~~2.1 Agreed to by all the Reliability Coordinators required to take the indicated action(s). *~~[Violation Risk Factor: Lower]~~* ~~R~~2.2 Distributed to all Reliability Coordinators that are required to take the indicated action(s). *~~[Violation Risk Factor: Lower]~~*
Notes: The RC SDT added a Time Horizon to the requirement and eliminated the VRFs that were applied to the subrequirements.	

Already Approved Standard	Proposed Replacement Requirement(s)
IRO-014-1 **R3.** A Reliability Coordinator's Operating Procedures, Processes, or Plans developed to support a Reliability Coordinator-to-Reliability Coordinator Operating Procedure, Process, or Plan shall include: **R3.1.** A reference to the associated Reliability Coordinator-to-Reliability Coordinator Operating Procedure, Process, or Plan. **R3.2.** The agreed-upon actions from the associated Reliability Coordinator-to-Reliability Coordinator Operating Procedure, Process, or Plan.	None – Retire the requirement
Notes: This requirement is administrative in nature describing the contents of the plans and should not be in a standard. The RC SDT proposes retiring R3 and its subrequirements and recommends converting these good utility practices into a guideline document for use in developing the operating procedures, processes or plans.	

Already Approved Standard	Proposed Replacement Requirement(s)
IRO-014-1 **R4.** Each of the Operating Procedures, Processes, and Plans addressed in Reliability Standard IRO-014 Requirement 1 and Requirement 3 shall: **R4.1.** Include version control number or date. **R4.2.** Include a distribution list. **R4.3.** Be reviewed, at least once every three years, and updated if needed	None – retire the requirement.
Notes: This requirement is administrative in nature describing the contents of the plans and should not be in a standard. The RC SDT proposes retiring R4 and its subrequirements and recommends converting these good utility practices into a guideline document for use in developing the operating procedures, processes or plans.	

Already Approved Standard	Proposed Replacement Requirement(s)

IRO-015-1
 	
R1. The Reliability Coordinator shall follow its Operating Procedures, Processes, or Plans for making notifications and exchanging reliability-related information with other Reliability Coordinators. *[Violation Risk Factor: Medium]*
 	
    R1.1 The Reliability Coordinator shall make notifications to other Reliability Coordinators of conditions in its Reliability Coordinator Area that may impact other Reliability Coordinator Areas. *[Violation Risk Factor: Medium]*
 	
R2. The Reliability Coordinator shall participate in agreed upon conference calls and other communication forums with adjacent Reliability Coordinators. *[Violation Risk Factor: Lower]*
 	
    R2.1 The frequency of these conference calls shall be agreed upon by all involved Reliability Coordinators and shall be at least weekly. *[Violation Risk Factor: Lower]*
 	
R3. The Reliability Coordinator shall provide reliability-related information as requested by other Reliability Coordinators. *[Violation Risk Factor: Medium]*
	IRO-014-2
	
	R5R3. For conditions or activities that impact other Reliability Coordinator Areas , The Eeach Reliability Coordinator shall make notifications and exchange reliability–related information with impacted Reliability Coordinators using its predefined Operating Procedures, Processes, or Plans for conditions that may impact other Reliability Coordinator Areas or other means to accomplish the notifications and exchange of reliability-related information. *[Violation Risk Factor: Medium]* *[Time Horizon: Real-time Operations and Operations Planning]*
	
	R6R4. The Each Reliability Coordinator shall participate in agreed upon conference calls, at least weekly, and other communication forums with impacted adjacent Reliability Coordinators. *[Violation Risk Factor: Lower] [Time Horizon: Real-time Operations]*
	
	    R6.1 The frequency of these conference calls shall be agreed upon by all involved Reliability Coordinators and shall be at least weekly. *[Violation Risk Factor: Lower]*

The RC SDT recommends retiring Standard IRO-015 and moving Requirements R1 and R2 to IRO-014-2 and revising as shown. The RC SDT proposes retiring R3 (as shown in the left column) as it is redundant with proposed R5 above. Reliability Coordinators already have several requirements aimed at providing data or information to other Reliability Coordinators in support of Reliability Coordinator responsibilities. For example, Reliability Coordinators provide reliability-related information to other Reliability Coordinators as part of IRO-010-1, R3 – they share information as they try to confirm the existence of operating issues as part of IRO-014-2 R5, etc.	

Already Approved Standard	Proposed Replacement Requirement(s)

IRO-016-1	IRO-014-2
R1. The Reliability Coordinator that identifies a potential, expected, or actual problem that requires the actions of one or more other Reliability Coordinators shall contact the other Reliability Coordinator(s) to confirm that there is a problem and then discuss options and decide upon a solution to prevent or resolve the identified problem. *[Violation Risk Factor: Medium]* **R1.1** If the involved Reliability Coordinators agree on the problem and the actions to take to prevent or mitigate the system condition, each involved Reliability Coordinator shall implement the agreed-upon solution, and notify the involved Reliability Coordinators of the action(s) taken. *[Violation Risk Factor: Medium]* **R1.2** If the involved Reliability Coordinators cannot agree on the problem(s) each Reliability Coordinator shall re-evaluate the causes of the disagreement (bad data, status, study results, tools, etc.). *[Violation Risk Factor: Medium]* **R1.2.1** If time permits, this re-evaluation shall be done before taking corrective actions. *[Violation Risk Factor: Medium]* **R1.2.2** If time does not permit, then each Reliability Coordinator shall operate as though the problem(s) exist(s) until the conflicting system status is resolved. *[Violation Risk Factor: Medium]* **R1.3** If the involved Reliability Coordinators cannot agree on the solution, the more conservative solution shall be implemented. *[Violation Risk Factor: Medium]*	**R5.** ~~When an expected or actual reliability issue is detected, the~~Each Reliability Coordinator. upon identification of an Adverse Reliability Impact, ~~shall~~ ~~confirm the existence of the issue with the~~ notify all impacted ~~other~~ Reliability Coordinators ~~that are involved~~. ~~In the event that the issue cannot be confirmed, each RC shall operate as though the problem exists.~~ *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]* **R6.** ~~When an expected or actual reliability issue exists and the~~ Each impacted ~~affected~~ Reliability Coordinator~~s~~ shall operate as though the problem exists when the identified Adverse Reliability Impact cannot be agreed to by the impacted Reliability Coordinators ~~can not agree on a mitigation plan, all impacted affected Reliability Coordinators shall implement the mitigation plan developed by the Reliability Coordinator who has the reliability issue.~~ *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]* **R7.** The Reliability Coordinator with the identified Adverse Reliability Impact shall develop a mitigation plan when the impacted Reliability Coordinators can not agree that the problem exists. *[Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]* **R8.** Each impacted Reliability Coordinator shall implement the mitigation plan developed by the Reliability Coordinator who has the identified Adverse Reliability Impact when the impacted Reliability Coordinators can not agree on a mitigation plan unless such actions would violate safety, equipment, or regulatory or statutory requirements. *[Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]*

Notes: IRO-014-2 R5 and R6 are revised versions of IRO-016-1, R1 and its subrequirements which were moved to this standard. The RC SDT removed the wording relating to the "most conservative solution" because it can not be measured. We are proposing to use the mitigation plan of the RC who is experiencing the issue in cases where an agreed to mitigation plan can not be developed.   Note that stakeholders proposed revisions to these requirements, and the RC SDT subdivided the requirements to add more clarity.