Implementation Plan Contents:

Prerequisite Approvals

There are no other Reliability Standards or Standard Authorization Requests (SARs), in progress or approved, that must be implemented before this standard can be implemented.

The proposed standards were developed for the 'Reliability Authority' function, but at the direction of the Standards Authorization Committee (SAC), the Drafting Team changed the term, 'Reliability Authority' to 'Reliability Coordinator'. The Reliability Coordinator function is recognized and using this term should make compliance easier for all involved.

Revision or Retirement of Sections of Version 0 Standards

Some requirements in Reliability Standards IRO-014-1, IRO-015-1 and IRO-016-1 address the same or similar objectives as Version 0 Standards.

The tables on the following pages highlight the specific requirements contained in Version 0 Standards that are duplicated in the proposed set of Reliability Standards (IRO-014-1, IRO-015-1, IRO-016-1). The Drafting Team recommends that the noted sections of Version 0 Standards be revised or retired when the proposed Version 1 Standards are adopted by the NERC Board of Trustees. The Drafting Team's justification for these recommendations is provided in the tables on the following pages.

Version 0 Standards being recommended for revision or retirement:

COM-002-0 Communications and Coordination
- Modify R2; retire R2.1, R2.2, R2.3

EOP-002-0 Capacity and Energy Emergencies
- Modify R2; retire R4

IRO-003-0 Reliability Coordination – Wide Area View
- Retire R2

IRO-004-0 Reliability Coordination – Operations Planning
- Retire R6; modify R7

IRO-005-0 Reliability Coordination – Current Day Operations
- Modify R7, R9, R11, R12, R15

TOP-005-0 Operational Reliability Information
- Retire R3

Version 0 Standards	Proposed Replacement Requirement(s)
COM-002-0_R2. **R2.** Each Balancing Authority and Transmission Operator shall notify its Reliability Coordinator, and all other potentially affected Balancing Authorities and Transmission Operators through predetermined communication paths of any condition that could threaten the reliability of its area or when firm load shedding is anticipated. The following information shall be conveyed to others in the Interconnection via an Interconnection-wide telecommunications system: **R2.1.** The Balancing Authority is unable to purchase capacity or energy to meet its demand and reserve requirements on a day-ahead or hour-by-hour basis. **R2.2.** The Transmission Operator recognizes that potential or actual line loadings, and voltage or reactive levels are such that a single Contingency could threaten the reliability of the Interconnection. (Once a single Contingency occurs, the Transmission Operator must prepare for the next Contingency.) **R2.3.** The Transmission Operator anticipates initiating a 3% or greater voltage reduction, public appeals for load curtailments, or firm load shedding for other than local problems.	**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. 1.1. These Operating Procedures, Processes or Plans shall collectively address, as a minimum, the following: 1.1.1. Communications and notifications, including the conditions[1] 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. 1.1.2. Energy and capacity shortages. 1.1.3. Planned or unplanned outage information. 1.1.4. Voltage control, including the coordination of reactive resources for voltage control. 1.1.5. Coordination of information exchange to support reliability assessments. 1.1.6. Authority to act to prevent and mitigate instances of causing Adverse Reliability Impacts to other Reliability Coordinator Areas. **IRO-015-1_R1** **R1.** The Reliability Coordinator shall follow its Operating Procedures, Processes or Plans for making notifications and exchanging reliability-related information with other Reliability Coordinators.

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

Notes:

- Only the portion of COM-002-0_R2 highlighted in yellow will be retired when IRO-014-1 becomes effective. According to V0 SDT Members, the portion of COM-002-0_R2 highlighted in yellow was assumed to be assigned to the RC since the RC is the only entity with access to an interconnection-wide communication system.
- Under IRO-014-1_R1 RCs must have Operating Procedures, Processes or Plans in place for making notifications and exchanging reliability-related information with other RCs. Under IRO-015-1, RCs must follow the Procedures Processes or Plans for making notifications and exchanging reliability-related information with other RCs.
- IRO-015-1 does not attempt to provide a comprehensive list of incidents that would result in an interconnection-wide announcement – the V1 Standard provides a list of topics that must be addressed and allows RCs the latitude to develop additional Procedures, Processes or Plans for making notifications and exchanging reliability-related information.
- IRO-015-1 does not require the use of an interconnection-wide telecommunication system.

Version 0 Standards	Proposed Replacement Requirement(s)
EOP-002-0_R2. Each Balancing Authority and Reliability Coordinator shall implement its capacity and energy emergency plan, when required and as appropriate, to reduce risks to the interconnected system.	**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. 1.2. These Operating Procedures, Processes or Plans shall collectively address, as a minimum, the following: 1.2.1. Communications and notifications, including the conditions[2] 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. 1.2.2. Energy and capacity shortages. 1.2.3. Planned or unplanned outage information. 1.2.4. Voltage control, including the coordination of reactive resources for voltage control. 1.2.5. Coordination of information exchange to support reliability assessments. 1.2.6. Authority to act to prevent and mitigate instances of causing Adverse Reliability Impacts to other Reliability Coordinator Areas. **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.

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

Notes:

- Only the portion of EOP-002-0_R2 highlighted in yellow should be retired when IRO-014-1 becomes effective. The remaining portion should be retired when the V1 Balance Resources and Demand Standards are adopted.
- Under IRO-014-1_R1, RCs must have Operating Procedures, Processes or Plans in place for making notifications and exchanging reliability-related information with other RCs. Under IRO-015-1 RCs must follow the Procedures Processes or Plans for making notifications and exchanging reliability-related information with other RCs.

Version 0 Standards	Proposed Replacement Requirement(s)
EOP-002-0_R4 A Reliability Coordinator that is experiencing an operating capacity or energy emergency shall communicate its current and future system conditions to neighboring areas.	**IRO-014-1_R1** **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 RCs to support Interconnection reliability. These Operating Procedures, Processes or Plans shall address Scenarios that affect other RC Areas as well as those developed in coordination with other RCs. 1.3. These Operating Procedures, Processes or Plans shall collectively address, as a minimum, the following: 1.3.1. Communications and notifications, including the conditions[3] under which one RC notifies other RCs; the process to follow in making those notifications; and the data and information to be exchanged with other RCs. 1.3.2. Energy and capacity shortages. 1.3.3. Planned or unplanned outage information. 1.3.4. Voltage control, including the coordination of reactive resources for voltage control. 1.3.5. Coordination of information exchange to support reliability assessments. 1.3.6. Authority to act to prevent and mitigate instances of causing Adverse Reliability Impacts to other RC Areas. **IRO-015-1_R1** **R1.** The Reliability Coordinator shall follow its Operating Procedures, Processes or Plans for making notifications and exchanging reliability-related information with other Reliability Coordinators. **R1.1.** The RC shall make notifications to other RCs of conditions in its RC Area that may impact other RC Areas.

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

Notes:

- When IRO-014-1 becomes effective, EOP-002-0_R4 should be retired.
- Under IRO-014-1_R1, RCs must have Operating Procedures, Processes or Plans in place for making notifications and exchanging reliability-related information with other RCs. Under IRO-015-1 RCs must follow the Procedures Processes or Plans for making notifications and exchanging reliability-related information with other RCs.

Version 0 Standards	Proposed Replacement Requirement(s)
IRO-003-0_R2 When a Reliability Coordinator is aware of an operational concern, such as declining voltages, excessive reactive flows, or an IROL violation, in a neighboring Reliability Coordinator Area, it shall contact the Reliability Coordinator in whose area the operational concern was observed. The two Reliability Coordinators shall coordinate any actions, including emergency assistance, required to mitigate the operational concern.	**IRO-016-1_R1.** **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. **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. **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.) **R1.2.1.** If time permits, this re-evaluation shall be done before taking corrective actions. **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. **R1.3.** If the involved Reliability Coordinators cannot agree on the solution, the more conservative solution shall be implemented.

Notes:

- When IRO-016-1 becomes effective, IRO-003-0_R2 should be retired.
- IRO-016-1_R1 is more comprehensive than IRO-003-0_R2 because it addresses actions to resolve differences of opinion between RCs. Resolving differences of opinion between RCs was a problem during the August 2003 Blackout.

Version 0 Standards	Proposed Replacement Requirement(s)
IRO-004_R6 When conditions warrant, the Reliability Coordinator shall initiate a conference call or other appropriate communications to address the results of its reliability analyses.	**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. **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. **R2.** The Reliability Coordinator shall participate in agreed upon conference calls and other communication forums with adjacent Reliability Coordinators. **R2.1** The frequency of these conference calls shall be agreed upon by all involved Reliability Coordinators and shall be at least weekly.

Notes:

- When IRO-015-1 becomes effective, IRO-004-0_R6 should be retired.
- IRO-015-1 requires the RC to share data and information with other RCs. IRO-014-1 requires that each RC have Operating Procedures, Processes or Plans to address situations where one RC needs to share data or information with other RCs, or needs another RC to take actions to alleviate a scenario that has an Adverse Reliability Impact. The results of reliability analyses is just one example of a scenario that may require one RC to share data or information with one or more other RCs.

Version 0 Standards	Proposed Replacement Requirement(s)
IRO-004_R7 If the results of these studies indicate potential SOL or IROL violations, the Reliability Coordinator shall issue the appropriate alerts via the Reliability Coordinator Information System (RCIS) and direct its Transmission Operators, Balancing Authorities and Transmission Service Providers to take any necessary action the Reliability Coordinator deems appropriate to address the potential SOL or IROL violation.	**IRO-014-1_R1** **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 RCs to support Interconnection reliability. These Operating Procedures, Processes or Plans shall address Scenarios that affect other RC Areas as well as those developed in coordination with other RCs. **R1.1** These Operating Procedures, Processes or Plans shall collectively address, as a minimum, the following: **R1.1.1** Communications and notifications, including the conditions[4] under which one RC notifies other RCs; the process to follow in making those notifications; and the data and information to be exchanged with other Ras. **R1.1.2** Energy and capacity shortages. **R1.1.3** Planned or unplanned outage information. **R1.1.4** Voltage control, including the coordination of reactive resources for voltage control. **R1.1.5** Coordination of information exchange to support reliability assessments. **R1.1.6** Authority to act to prevent and mitigate instances of causing Adverse Reliability Impacts to other RC Areas. **IRO-015-1_R1** **R1.** The Reliability Coordinator shall follow its Operating Procedures, Processes or Plans for making notifications and exchanging reliability-related information with other Reliability Coordinators. **R1.1** The RC shall make notifications to other RCs of conditions in its RC Area that may impact other RC Areas.

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

Notes:

- When IRO-014-1 and IRO-015-1 become effective, the highlighted sections of IRO-004-0_R7 should be retired.
- The requirement to notify other RCs is addressed in IRO-015-1. Note that IRO-015-1 does not mention the use of a specific tool. This omission can be found throughout V1 Standards, and is intended to result in the need for fewer changes to standards. While the tool used may change in the future, the performance of making the notification would not change and by leaving out the name of the tool, no conforming changes would be needed to the standard if the tool did change.
- Alerts may not be practical for all scenarios, and the V1 Standards require the RC to notify entities who are required to act to prevent/mitigate a problem.

Version 0 Standards	Proposed Replacement Requirement(s)
IRO-005_R7 The Reliability Coordinator shall participate in NERC hotline discussions, assist in the assessment of reliability of the overall interconnected system, and coordinate actions in anticipated or actual emergency situations. The Reliability Coordinator shall disseminate such information within its Reliability Coordinator Area, as required.	**IRO-014-1_R1** **R1.** The RC 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 RCs to support Interconnection reliability. These Operating Procedures, Processes or Plans shall address Scenarios that affect other RC Areas as well as those developed in coordination with other RCs. **R1.1** These Operating Procedures, Processes or Plans shall collectively address, as a minimum, the following: **R1.1.1** Communications and notifications, including the conditions[5] under which one RC notifies other RCs; the process to follow in making those notifications; and the data and information to be exchanged with other RCs. **R1.1.2** Energy and capacity shortages. **R1.1.3** Planned or unplanned outage information. **R1.1.4** Voltage control, including the coordination of reactive resources for voltage control. **R1.1.5** Coordination of information exchange to support reliability assessments. **R1.1.6** Authority to act to prevent and mitigate instances of causing Adverse Reliability Impacts to other RC Areas. **IRO-015-1_R1** **R1.** The RC shall follow its Operating Procedures, Processes or Plans for making notifications and exchanging reliability-related information with other Reliability Coordinators. **R1.1** The RC shall make notifications to other RCs of conditions in its RC Area that may impact other RC Areas. **R2.** The RC shall participate in agreed upon conference calls and other communication forums with adjacent RCs.

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

Notes:

- When IRO-014-1 and IRO-015-1 become effective, the highlighted sections of IRO-005-0_R7 should be retired.
- IRO-015-1 requires the RC to share data and information with other RCs. IRO-014-1 requires that each RC have Operating Procedures, Processes or Plans to address situations where one RC needs to share data or information with other RCs, or needs another RC to take actions to alleviate a scenario that has an Adverse Reliability Impact.
- The V0 Standard is difficult to measure because no criteria are established in the standard for things such as the frequency of participation. The set of V1 Coordinate Operations Standards requires that the criteria for sharing information be identified in advance and then be shared as specified. V1 Standards do not reference or require the use of specific tools such as the NERC Hotline since the tools used and the names applied to those tools may change.

Version 0 Standards	Proposed Replacement Requirement(s)
IRO-005-0_R9 The Reliability Coordinator shall coordinate with other Reliability Coordinators and Transmission Operators, Balancing Authorities, and Generator Operators as needed to develop and implement action plans to mitigate potential or actual SOL, IROL, CPS, or DCS violations. The Reliability Coordinator shall coordinate pending generation and transmission maintenance outages with other Reliability Coordinators and Transmission Operators, Balancing Authorities, and Generator Operators as needed in both the real time and next-day reliability analysis timeframes.	**IRO-014-1_R1** **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 RCs to support Interconnection reliability. These Operating Procedures, Processes or Plans shall address Scenarios that affect other RC Areas as well as those developed in coordination with other RCs. **R1.1** These Operating Procedures, Processes or Plans shall collectively address, as a minimum, the following: **R1.1.1** Communications and notifications, including the conditions[6] under which one RC notifies other RCs; the process to follow in making those notifications; and the data and information to be exchanged with other Ras. **R1.1.2** Energy and capacity shortages. **R1.1.3** Planned or unplanned outage information. **R1.1.4** Voltage control, including the coordination of reactive resources for voltage control. **R1.1.5** Coordination of information exchange to support reliability assessments. **R1.1.6** Authority to act to prevent and mitigate instances of causing Adverse Reliability Impacts to other RC Areas.

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

Notes:

- When IRO-014-1 becomes effective, the highlighted sections of IRO-005-0_R9 should be retired.
- IRO-014-1 replaces the text highlighted in yellow. (Both the Balance Resources and Demand Standards require RCs to follow action plans developed under the Coordinate Operations Standards for interconnection frequency issues - IROL Standards require RCs to have and implement action plans for prevention and mitigation of IROLs. The Balance Resources and Demand Standards replace V0 CPS and DCS standards.)
- IRO-014-1 requires RCs to have Operating Procedures, Processes or Plans to address exchange of information with other RCs relative to planned and unplanned outages.

Version 0 Standards	Proposed Replacement Requirement(s)
IRO-005-0_R11 The Reliability Coordinator shall identify sources of large Area Control Errors that may be contributing to Frequency Error, Time Error, or Inadvertent Interchange and shall discuss corrective actions with the appropriate Balancing Authority. If a Frequency Error, Time Error, or inadvertent problem occurs outside of the Reliability Coordinator Area, the Reliability Coordinator shall initiate a NERC hotline call to discuss the Frequency Error, Time Error, or Inadvertent Interchange with other Reliability Coordinators. The Reliability Coordinator shall direct its Balancing Authority to comply with CPS and DCS.	**IRO-016-1_R1** **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. **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. **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.)

Notes:

- When IRO-016-1 becomes effective, the highlighted section of IRO-005-0_R11 should be retired. (The Balance Resource and Demand (BRD) Standards require the RC to coordinate with other RCs by following action plans developed under IRO-015-1.) V1 Standards don't require use of NERC Hotline or any other specific tool.
- IRO-016-1_R1 requires RCs to coordinate actions to address real-time problems involving coordination of actions between RCs.

Version 0 Standards	Proposed Replacement Requirement(s)
IRO-005-0_R12 Whenever a Special Protection System that may have an inter-Balancing Authority, or inter-Transmission Operator, or inter-Reliability Coordinator Area impact (e.g., could potentially affect transmission flows resulting in a SOL or IROL violation) is armed, the Reliability Coordinators shall be aware of the impact of the operation of that Special Protection System on inter-area flows. The Transmission Operator shall immediately inform the Reliability Coordinator of the status of the Special Protection System including any degradation or potential failure to operate as expected.	**IRO-014-1_R1** **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 RCs to support Interconnection reliability. These Operating Procedures, Processes or Plans shall address Scenarios that affect other RC Areas as well as those developed in coordination with other RCs. **R1.1** These Operating Procedures, Processes or Plans shall collectively address, as a minimum, the following: **R1.1.1** Communications and notifications, including the conditions[7] under which one RC notifies other RCs; the process to follow in making those notifications; and the data and information to be exchanged with other RCs. **R1.1.2** Energy and capacity shortages. **R1.1.3** Planned or unplanned outage information. **R1.1.4** Voltage control, including the coordination of reactive resources for voltage control. **R1.1.5** Coordination of information exchange to support reliability assessments. **R1.1.6** Authority to act to prevent and mitigate instances of causing Adverse Reliability Impacts to other RC Areas.

Notes:

- When IRO-014-1 becomes effective, the highlighted section of IRO-005-0_R12 should be retired.
- IRO-014-1_R1 requires the RCs to have Operating Processes, Procedures or Plans to address issues in one RC Area that may have an Adverse Reliability Impact on other RC Areas. This includes having a procedure, process or plan that identifies the conditions under which one RC notifies another RC – and arming of an SPS is an example that may be included in this. IRO-015-1_R1 requires the RC to follow these procedures, processes or plans.

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

Version 0 Standards	Proposed Replacement Requirement(s)
IRO-005-0_R15 Each Reliability Coordinator who foresees a transmission problem (such as an SOL or IROL violation, loss of reactive reserves, etc.) within its Reliability Coordinator Area shall issue an alert to all impacted Transmission Operators and Balancing Authorities in its Reliability Coordinator Area, and all impacted Reliability Coordinators within the Interconnection via the Reliability Coordinator Information System (RCIS) without delay. The receiving Reliability Coordinator shall disseminate this information to its impacted Transmission Operators and Balancing Authorities. The Reliability Coordinator shall notify all impacted Transmission Operators, Balancing Authorities, and Reliability Coordinators when the transmission problem has been mitigated.	**IRO-016-1_R1** **R1.** The RC that identifies a potential, expected, or actual problem that requires the actions of one or more other RCs shall contact the other RC(s) to confirm that there is a problem and then discuss options and decide upon a solution to prevent or resolve the identified problem.

Notes:

- When IRO-016-1 becomes effective, the highlighted sections of IRO-005-0_R15 should be retired.
- Alerts may not be practical for all scenarios, and for almost all scenarios, IRO-015-1 and IRO-016-1 require the RC to notify entities who are required to act to prevent/mitigate a problem. With any transmission problem, all entities on the interconnection will be impacted to some degree, making this criteria too broad as a threshold for making notifications. Thus, the V1 standard requires only notifying those that must take action and those that are impacted by those actions.

Version 0 Standards	Proposed Replacement Requirement(s)
TOP-005-0_R3 Upon request, each Reliability Coordinator shall, via the ISN or equivalent system, exchange with other Reliability Coordinators operating data that are necessary to allow the Reliability Coordinators to perform operational reliability assessments and coordinate reliable operations. Reliability Coordinators shall share with each other the types of data listed in Attachment 1-TOP-005-0 "Electric System Reliability Data," unless otherwise agreed to.	**IRO-014-1_R1** **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 RCs to support Interconnection reliability. These Operating Procedures, Processes or Plans shall address Scenarios that affect other RC Areas as well as those developed in coordination with other RCs. **R1.1** These Operating Procedures, Processes or Plans shall collectively address, as a minimum, the following: **R1.1.1** Communications and notifications, including the conditions[8] under which one RC notifies other RCs; the process to follow in making those notifications; and the data and information to be exchanged with other RCs. **R1.1.2** Energy and capacity shortages. **R1.1.3** Planned or unplanned outage information. **R1.1.4** Voltage control, including the coordination of reactive resources for voltage control. **R1.1.5** Coordination of information exchange to support reliability assessments. **R1.1.6** Authority to act to prevent and mitigate instances of causing Adverse Reliability Impacts to other RC Areas. **IRO-015-1_R1** **R1.** The Reliability Coordinator shall follow its Operating Procedures, Processes or Plans for making notifications and exchanging reliability-related information with other Reliability Coordinators.

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

Notes:

- When IRO-015-1 becomes effective, TOP-005-0_R3 should be retired. IRO-014-1_R1.1.5 requires the RCs to have procedures, processes or plans that address coordination of information exchange to support reliability assessments.
- IRO-015-1_R1 requires the RC to follow its procedures, processes or plans for exchanging reliability-related information with other RCs.

Functions That Must Comply with the Proposed Standards

All requirements in the set of proposed Coordinate Operations Standards are assigned to the Reliability Coordinator.

Standard	Functions That Must Comply With the Requirements
IRO-014-1 – Procedures to Support Coordination Between Reliability Coordinators	Reliability Coordinator
IRO-015-1 – Notifications and Information Exchange Between Reliability Coordinators	Reliability Coordinator
IRO-016-1 – Coordination of Real-time Activities Between Reliability Coordinators	Reliability Coordinator

Phased-in Compliance

The following table identifies the date entities must be fully compliant with each requirement.

The effective date is the date entities are expected to meet the performance identified in a standard. The proposed standards all have a delay between the date the BOT adopts the standards and the 'effective' date of twelve months. The Drafting Team recognizes that many entities have resources focused on ensuring compliance with Version 0 Standards and the twelve month delay for full compliance with IRO-014-1 and IRO-015-1, and IRO-016-1, should give entities the additional time needed to become compliant with these new standards.

Requirement	Compliance Date
IRO-014-1 – Procedures to Support Coordination Between Reliability Coordinators	Full compliance 12 months from BOT adoption date. (November 1, 2006)
IRO-015-1 – Notifications and Information Exchange Between Reliability Coordinators	Full compliance 12 months from BOT adoption date. (November 1, 2006)
IRO-016-1 –Coordination of Real-time Activities Between Reliability Coordinators	Full compliance 12 months from BOT adoption date. (November 1, 2006)