

A. Introduction

1. **Title:** Reliability Coordinator Data and information Specification and Collection
2. **Number:** IRO-010-5
3. **Purpose:** To prevent instability, uncontrolled separation, or Cascading outages that adversely impact reliability, by ensuring each Reliability Coordinator has the data and information it needs to plan, monitor and assess the operation of its Reliability Coordinator Area.
4. **Applicability:**
 - 4.1. Reliability Coordinator
 - 4.2. Balancing Authority
 - 4.3. Generator Owner
 - 4.4. Generator Operator
 - 4.5. Transmission Operator
 - 4.6. Transmission Owner
 - 4.7. Distribution Provider
5. **Effective Date*:**

B. Requirements

- R1.** The Reliability Coordinator shall maintain documented specification(s) for the data and information necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments. The specification shall include but not be limited to: (*Violation Risk Factor: Low*) (*Time Horizon: Operations Planning*)
- 1.1.** A list of data and information needed by the Reliability Coordinator to support its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments including non-BES data and information, external network data and information, and identification of the entities responsible for responding to the specification as deemed necessary by the Reliability Coordinator.
 - 1.2.** Provisions for notification of current Protection System and Remedial Action Scheme (RAS) status or degradation that impacts System reliability.
 - 1.3.** Provisions for notification of BES generating unit(s) during local forecasted cold weather to include:
 - 1.3.1** Operating limitations based on:
 - 1.3.1.1.** capability and availability;
 - 1.3.1.2.** fuel supply and inventory concerns;
 - 1.3.1.3.** fuel switching capabilities; and
 - 1.3.1.4.** environmental constraints
 - 1.3.2.** Generating unit(s) minimum:
 - 1.3.2.1.** design temperature; or
 - 1.3.2.2.** historical operating temperature; or
 - 1.3.2.3.** current cold weather performance temperature determined by an engineering analysis.
 - 1.4.** Identification of a mutually agreeable process for resolving conflicts.
 - 1.5.** Method(s) for the entity identified in Part 1.1 to provide data and information that includes, but is not limited to.
 - 1.5.1** Specific deadlines or periodicity in which data and information is to be provided;
 - 1.5.2** Performance criteria for the availability and accuracy of data and information, as applicable;
 - 1.5.3** Provisions to update or correct data and information, as applicable or necessary.
 - 1.5.4** A mutually agreeable format.
 - 1.5.5** A mutually agreeable method(s) for securely transferring data and information.

- M1.** The Reliability Coordinator shall make available its dated, current, in force documented specification(s) for data and information.
- R2.** The Reliability Coordinator shall distribute its data and information specification(s) to entities that have data required by the Reliability Coordinator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments. *(Violation Risk Factor: Low) (Time Horizon: Operations Planning)*
- M2.** The Reliability Coordinator shall make available evidence that it has distributed its specification(s) to entities that have data and information required by the Reliability Coordinator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments. This evidence could include but is not limited to web postings with an electronic notice of the posting, dated operator logs, voice recordings, postal receipts showing the recipient, date and contents, or e-mail records.
- R3.** Each Reliability Coordinator, Balancing Authority, Generator Owner, Generator Operator, Transmission Operator, Transmission Owner, and Distribution Provider receiving a specification(s) in Requirement R2 shall satisfy the obligations of the documented specifications. *(Violation Risk Factor: Medium) (Time Horizon: Operations Planning, Same-Day Operations, Real-time Operations)*
- M3.** The Reliability Coordinator, Balancing Authority, Generator Owner, Generator Operator, Reliability Coordinator, Transmission Operator, Transmission Owner, and Distribution Provider receiving a specification(s) in Requirement R2 shall make available evidence that it satisfied the obligations of the documented specification using the specified criteria. Such evidence could include but is not limited to electronic or hard copies of data transmittals or attestations of receiving entities.

C. Compliance

1. Compliance Monitoring Process

1.1. Compliance Enforcement Authority:

The British Columbia Utilities Commission.

- 1.2. Evidence Retention:** The following evidence retention period(s) 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 CEA 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, Balancing Authority, Generator Owner, Generator Operator, Transmission Operator, Transmission Owner, and Distribution Provider shall each keep data or evidence to show compliance as identified below unless directed by its CEA to retain specific evidence for a longer period of time as part of an investigation:

The Reliability Coordinator shall retain its dated, current, in force documented specification(s) for the data and information necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments for Requirement R1, Measure M1 as well as any documents in force since the last compliance audit.

The Reliability Coordinator shall keep evidence for three calendar years that it has distributed its specification(s) to entities that have data required by the Reliability Coordinator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments for Requirement R2, Measure M2.

Each Reliability Coordinator, Balancing Authority, Generator Owner, Generator Operator, Transmission Operator, Transmission Owner, and Distribution Provider receiving a specification(s) shall retain evidence for the most recent 90-calendar days that it has satisfied the obligations of the documented specifications in accordance with Requirement R3 and Measurement M3.

Violation Severity Levels

R#	Time Horizon	VRF	Violation Severity Levels			
			Lower	Moderate	High	Severe
R1	Operations Planning	Low	The Reliability Coordinator did not include one or two of the parts (Part 1.1 through Part 1.5) of the documented specification(s) for the data and information necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Reliability Coordinator did not include three of the parts (Part 1.1 through Part 1.5) of the documented specification(s) for the data and information necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Reliability Coordinator did not include four of the parts (Part 1.1 through Part 1.5) of the documented specification(s) for the data and information necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Reliability Coordinator did not include any of the parts (Part 1.1 through Part 1.5) of the documented specification(s) for the data and information necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments. OR, The Reliability Coordinator did not have a documented specification(s) for the data and information necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.
For the Requirement R2 VSLs only, the intent of the SDT is to start with the Severe VSL first and then to work your way to the left until you find the situation that fits. In this manner, the VSL will not be discriminatory by size of entity. If a small entity has just one affected reliability entity to inform, the intent is that that situation would be a Severe violation.						

R#	Time Horizon	VRF	Violation Severity Levels			
			Lower	Moderate	High	Severe
R2	Operations Planning	Low	The Reliability Coordinator did not distribute its specification(s) as developed in Requirement R1 to one entity, or 5% or less of the entities, whichever is greater, that have data and information required by the Reliability Coordinator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Reliability Coordinator did not distribute its specification(s) as developed in Requirement R1 to two entities, or more than 5% and less than or equal to 10% of the reliability entities, whichever is greater, that have data and information required by the Reliability Coordinator's Operational Planning Analyses, and Real-time monitoring, and Real-time Assessments.	The Reliability Coordinator did not distribute its specification(s) as developed in Requirement R1 to three entities, or more than 10% and less than or equal to 15% of the reliability entities, whichever is greater, that have data and information required by the Reliability Coordinator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Reliability Coordinator did not distribute its specification(s) as developed in Requirement R1 to four or more entities, or more than 15% of the entities, whichever is greater, that have data and information required by the Reliability Coordinator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.
R3	Operations Planning, Same-Day Operations, Real-time Operations	Medium	The responsible entity receiving a specification(s) in Requirement R2 satisfied the obligations of the documented specifications but failed to meet one of the parts in Requirement Part 1.5.	The responsible entity receiving a specification(s) in Requirement R2 satisfied the obligations of the documented specifications but failed to meet two of the parts in Requirement R1Part 1.5.	The responsible entity receiving a specification(s) in Requirement R2 satisfied the obligations of the documented specifications but failed to meet any of the parts in Requirement R1 Part 1.5.	The responsible entity receiving a specification(s) in Requirement R2 did not satisfy the obligations of the documented specifications .

D. Regional Variances

None.

E. Interpretations

None.

F. Associated Documents

None.

Version History

Version	Date	Action	Change Tracking
1	October 17, 2008	Adopted by Board of Trustees	New
1a	August 5, 2009	Added Appendix 1: Interpretation of R1.2 and R3 as approved by Board of Trustees	Addition
1a	March 17, 2011	Order issued by FERC approving IRO- 010-1a (approval effective 5/23/11)	
1a	November 19, 2013	Updated VRFs based on June 24, 2013 approval	
2	April 2014	Revisions pursuant to Project 2014-03	
2	November 13, 2014	Adopted by NERC Board of Trustees	Revisions under Project 2014-03
2	November 19, 2015	FERC approved IRO-010-2. Docket No. RM15-16-000	
3	February 6, 2020	Adopted by NERC Board of Trustees	Revisions under Project 2017-07
3	October 30, 2020	FERC approved IRO-010-3. Docket No. RD20-4-000	
4	March 22, 2021	Adopted by NERC Board of Trustees	Revisions under Project 2019-06 Cold Weather
4	June 11, 2021	Adopted by NERC Board of Trustees	Revisions under Project 2019-06
4	August 24, 2021	FERC approved IRO-010-4. Docket No. RD21-5-000	
4	August 27, 2021	Effective Date	April 1, 2023
5	August 17, 2023	Adopted by NERC Board of Trustees	Revision under project 2021-06

5	November 2, 2023	FERC Approved IRO-010-5. Docket No. RD23-6-000	
5	November 3, 2023	Effective Date	July 1, 2025