NERC

Project 2021-06

Modifications to IRO-010 and TOP-003 May 24, 2023

Matthew Harward, Chair (SPP) Dennis Sauriol, Vice Chair (AEP) Josh Blume, NERC Standards Developer





- North American Electric Reliability Corporation (NERC) Antitrust Guidelines
 - It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or that might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition
- Notice of Open Meeting
 - Participants are reminded that this webinar is public. The access number was widely distributed. Speakers on the call should keep in mind that the listening audience may include members of the press and representatives of various governmental authorities, in addition to the expected participation by industry stakeholders.



Drafting Team- SAR and Standards

Drafting Team Roster

Project 2021-06 Modifications to IRO-010 and TOP-003

	Name	Entity
Chair	Matthew Harward	Southwest Power Pool, Inc.
Vice Chair	Dennis Sauriol	American Electric Power
Members	Robert (Bob) Cielen	BC Hydro
	Sarah B. Facey	GSOC
	Barry Jones	Western Area Power Administration (WAPA)
	Nick Messner	California ISO
	Jennifer Richards	SCPSA (Santee Cooper)
	Stephen Solis	Electric Reliability Council of Texas, Inc.
NERC Staff	Josh Blume – Standards Developer	North American Electric Reliability Corporation



- Part of Standards Efficiency Review Phase 2
- Title: Operational Data Exchange Simplification
- Industry Need: The proposed project will enhance the effective and efficient administration of operational data exchanges between Responsible Entities essential for safe, secure, and reliable operations



"The primary purpose of the project is to simplify administrative burdens identified by the SER Phase 2 team associated with the current IRO-010-4 and TOP-003-5 standards and limit unnecessary data retention requirements[.]"



- Mitigate zero-defect expectations for entities receiving data specification to demonstrate perfect performance
 - Maintain flexibility for various operational environments and available industry resources
 - Identify data and information exchanges between provider and requester that are facilitated through a third-party intermediary
- Focus on event or unresolved data conflicts between entities
 - Dispute resolution
 - Negotiating data exchange where entities disagree on data necessity



- Clarify that project relates only to 4 "reliability tasks" identified in the two standards
 - Operational Planning Analysis
 - Real-time Assessments
 - Real-time Monitoring
 - Balancing Authority analysis functions



- The Standard Drafting Team should seek to identify opportunities to evaluate and revise redundant requirements; however, the Standard Drafting Team should not revise requirements that are not directly related to the four reliability tasks identified above.
 - Is the purpose of the activity currently within scope of one or more of the reliability tasks identified in the two standards? If yes, consider revising
 - If minor modifications where made to the standards or definitions would activity be within scope? If yes, consider revising
- Note: SDT reviewed standards listed in SAR and found no instances of redundancy and is not recommending any retirements in Draft 1



- Deleted the data third party intermediary language from standards.
- Combined and re organized sub requirements in R1 R3
- The team modified VRFs and VSLs in accordance to NERC grading
- Developed a white paper
 - Substantive changes to standards explained
 - Explained why the drafting team is not making changes to any other standards



Proposed IRO-010-5



- 1. Title: Reliability Coordinator Data and Information Specification and Collection
- 2. Number: IRO-010-54
- 3. Purpose: To prevent instability, uncontrolled separation, or Cascading outages that adversely impact reliability, by ensuring the Reliability Coordinator has the data<u>and information</u> it needs to<u>plan</u>, Monitor and assess the operation of its Reliability Coordinator Area.

RELIABILITY | RESILIENCE | SECURITY



Proposed IRO-010-5- R1

- R1. The Reliability Coordinator shall maintain a documented specification for the data and information necessary for it to perform its Operational Planning Analyses, Realtime monitoring, and Real-time Assessments. The data 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 Assessment, including non-BES data and <u>information</u>,- external network data <u>and information</u>, and <u>identification of the entity responsible</u> 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;



Proposed IRO-010-5- R1.4-R1.5

- 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.** Methods 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 methods for securely transferring data and information.
 - The deadline by which the respondent is to provide the indicated data.



Proposed IRO-010-5- R3

- R3. Each Reliability Coordinator, Balancing Authority, Generator Owner, Generator Operator, Transmission Operator, Transmission Owner, and Distribution Provider receiving a data specification in Requirement R2 shall satisfy the obligations of the documented specifications-using: (Violation Risk Factor: Medium) (Time Horizon: Operations Planning, Same-Day Operations, Real-time Operations)
 - A mutually agreeable format
 - 3.2. A mutually agreeable process for resolving data conflicts
 - 3.3. A mutually agreeable security protocol



Proposed TOP-003-6



- 1. Title: Operational ReliabilityTransmission Operator and Balancing Authority Data and Information Specification and Collection
- 2. Number: TOP-003-65
- Purpose: To ensure that the Transmission Operator and Balancing Authority have <u>the</u> data <u>and information it</u> need<u>s</u>ed to <u>plan, monitor, and assess the</u> fulfill their operational <u>of its Transmission Operator Area or Balancing Authority Area</u> and <u>planning responsibilities</u>.



- R1. Each Transmission Operator shall maintain a documented specification for the data and information necessary for it to perform its Operational Planning Analyses, Realtime monitoring, and Real-time Assessments. The data specification shall include, but not be limited to: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]
 - 1.1. A list of data and information needed by the Transmission Operator to support its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments including non-BES data <u>and information, and external network</u> data<u>and information, and identification of the entity responsible for</u> <u>responding to the specification</u> as deemed necessary by the Transmission Operator.
 - **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.** The deadline by which the respondent is to Methods for the entity identified in Part 1.1 to provide the indicated data and information that includes at a minimum the following.
 - 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.
 - **1.3.3.** A mutually agreeable methods for securely transferring data and information.
 - 1.5.5.



- R2. Each Balancing Authority shall maintain a documented specification for the data <u>and</u> <u>information</u> necessary for it to perform its analysis functions and Real-time monitoring. The data specification shall include, but not be limited to: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]
 - 2.1. A list of data and information needed by the Balancing Authority to support its analysis functions and Real-time monitoring including non-Bulk Electric System data and information, and external network data and information, as deemed necessary by the Balancing Authority, and identification of the entity responsible for responding to the specification.
 - **2.2.** Provisions for notification of current Protection System and Remedial Action Scheme status or degradation that impacts System reliability.
 - 2.3. Provisions for notification of BES generating unit(s) status during local forecasted cold weather to include:
 - 2.3.1. Operating limitations based on:



- 2.3.1.1. capability and availability;
- 2.3.1.2. fuel supply and inventory concerns;
- 2.3.1.3. fuel switching capabilities; and
- 2.3.1.4. environmental constraints.
- 2.3.2. Generating unit(s) minimum:
 - 2.3.2.1. design temperature; or
 - 2.3.2.2. historical operating temperature; or
 - 2.3.2.3. current cold weather performance temperature determined by an engineering analysis.
- 2.4. Identification of a mutually agreeable process in resolving conflicts.
- **2.5.** A periodicity for providing data .<u>Methods for the entity identified in Part 2.1 to</u> provide data and information that includes at a minimum the following.
 - 2.5.1. Specific deadlines or periodicity in which data and information is to be provided;
 - **2.5.2.** Performance criteria for the availability and accuracy of data and information, as applicable;
 - **2.5.3.** Provisions to update or correct data and information, as applicable or necessary.
 - 2.5.4. A mutually agreeable format.
 - **2.3.3.**2.5.5. A mutually agreeable methods for securely transferring data and information.

The deadline by which the respondent is to provide the indicated data.



R5. Each Transmission Operator, Balancing Authority, Generator Owner, Generator Operator, Transmission Owner, and Distribution Provider receiving a data specification in Requirement R3 or R4 shall satisfy the obligations of the documented specifications: [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same-Day Operations, Real-time Operations]

5.1. A mutually agreeable format

5.2. A mutually agreeable process for resolving data conflicts

5.3. A mutually agreeable security protocol





- IRO-010-5 and TOP-003-6 are substantively identical
- Revisions to data specification requirements of RC, BA and TOP
- Re-title TOP-003-6 to make it consistent with IRO-010-5
- Dispute resolution process included in data specification
- Clarifies protocols for responding to data requests
 - $\circ\;$ Deadlines or periodicity to be defined
 - Performance criteria for availability and accuracy of data
 - Provision to update date and information as necessary
- Clarifies respondent obligation to provide data in accordance with criteria established in R1 Parts R1.1 through R1.5



- Effective Date Reliability Standards IRO-010-5 and TOP-003-06
 - 18 months after FERC order
 - Prior versions retired immediately prior to effective date



Next Steps for 2021-06



- Project page
- White Paper
- Ballot dates
 - 45 day additional ballot and comment period
 - May 5th 2023 to June 20th 2023
 - Non-binding polls of VRF and VSL will be from June 9th to June 20th 2023
- Contact information
 - Josh Blume: josh.blume@nerc.net
 - Matthew Harward: <u>mharward@spp.org</u>
 - Dennis R Sauriol: <u>drsauriol@aep.com</u>



Questions and Answers



RELIABILITY | RESILIENCE | SECURITY