A. Introduction

1. **Title:** Transmission Operator and Balancing Authority Data and Information Specification and Collection

2. **Number:** TOP-003-8

3. **Purpose:** To ensure that each Transmission Operator and Balancing Authority has the data and information it needs to plan, monitor, and assess the operation of its Transmission Operator Area or Balancing Authority Area.

4. **Applicability:**

   4.1 Functional Entities:

   4.1.1 Transmission Operator

   4.1.2 Balancing Authority

   4.1.3 Generator Owner

   4.1.4 Generator Operator

   4.1.5 Transmission Owner

   4.1.6 Distribution Provider

5. **Effective Date:** See Implementation Plan for Project 2022-02.

B. Requirements and Measures

R1. Each Transmission Operator 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: 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, as deemed necessary by the Transmission Operator, including non-BES data and information, external network data and information, Inverter-based Resource (IBR)-specific data and parameters, and identification of the entities responsible for responding to the specification.

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 the data and information that includes, but is not limited to:

1.5.1. Specified 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. Requirements for necessary model submissions to be consistent with the model submitted for planning purposes, subject to modifications for operations purposes, as applicable;

1.5.4. Provisions to update or correct data and information, as applicable or necessary;

1.5.5. A mutually agreeable format;

1.5.6. Mutually agreeable method(s) for securely transferring data and information.

M1. Each Transmission Operator shall make available its dated, current, in force documented specification(s) for data and information.

R2. Each Balancing Authority shall maintain documented specification(s) for the data and information necessary for it to perform its analysis functions, Real-time monitoring, and Near-Term Energy Reliability Assessments. 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, Real-time monitoring, and Near-Term Energy Reliability Assessments, as deemed necessary by the Balancing Authority, including non-Bulk Electric System data and information, IBR-specific data and parameters, and external network data and information, 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. Methods for the entity identified in Part 2.1 to provide data and information that includes, but is not limited to:

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. Requirements for necessary model submissions to be consistent with the model submitted for planning purposes, subject to modifications for operations purposes, as applicable;

2.5.4. Provisions to update or correct data and information, as applicable or necessary.

2.5.5. A mutually agreeable format.

2.5.6. A mutually agreeable method(s) for securely transferring data and information.

M2. Each Balancing Authority shall make available its dated, current, in force documented specification(s) for data and information.

R3. Each Transmission Operator shall distribute its data and information specification(s) to entities that have data and information required by the Transmission Operator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments. *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning]*

M3. Each Transmission Operator shall make available evidence that it has distributed its data specification(s) to entities that have data and information required by the Transmission Operator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.

Such 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 email records.

R4. Each Balancing Authority shall distribute its data and information specification(s) to entities that have data and information required by the Balancing Authority's analysis functions, Real-time monitoring, and Near-Term Energy Reliability Assessments. *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning]*

M4. Each Balancing Authority shall make available evidence that it has distributed its data specification(s) to entities that have data and information required by the Balancing Authority's analysis functions, Real-time monitoring, and Near-Term Energy Reliability Assessments. Such 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, or email records.

R5. Each Transmission Operator, Balancing Authority, Generator Owner, Generator Operator, Transmission Owner, and Distribution Provider receiving a data and information specification(s) 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]*

M5. Each Transmission Operator, Balancing Authority, Generator Owner, Generator Operator, Transmission Owner, and Distribution Provider receiving a specification(s) in Requirement R3 or R4 shall make available evidence that it has satisfied the obligations of the documented specification. 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: "Compliance Enforcement Authority" means NERC or the Regional Entity in their respective roles of monitoring and enforcing compliance with the NERC Reliability Standards.

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 Compliance Enforcement Authority (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 applicable entity 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.

- Each Transmission Operator shall retain its dated, current, in force, documented specification for the data and information necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments in accordance with Requirement R1 and Measurement M1 as well as any documents in force since the last compliance audit.
- Each Balancing Authority shall retain its dated, current, in force, documented specification(s) for the data and information necessary for it to perform its analysis functions, Real-time monitoring, and Near-Term Energy Reliability Assessments in accordance with Requirement R2 and Measurement M2, as well as any documents in force since the last compliance audit.
- Each Transmission Operator shall retain evidence for three calendar years that it has distributed its specification(s) to entities that have data required by the Transmission Operator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments in accordance with Requirement R3 and Measurement M3.
- Each Balancing Authority shall retain evidence for three calendar years that it has distributed its specification(s) to entities that have data required by the Balancing Authority's analysis functions, Real-time monitoring, and Near-Term Energy Reliability Assessments in accordance with Requirement R4 and Measurement M4.
- Each Balancing Authority, Generator Owner, Generator Operator, Transmission Operator, Transmission Owner, and Distribution Provider receiving a specification(s) in Requirement R3 or R4 shall retain evidence for the most recent 90-calendar days that it has satisfied the obligations of the documented specifications in accordance with Requirement R5 and Measurement M5.

1.3. Compliance Monitoring and Enforcement Program: "Compliance Monitoring Enforcement Program" or "CMEP" means, depending on the context (1) the NERC Compliance Monitoring and Enforcement Program (Appendix 4C to the NERC Rules of Procedure) or the Commission-approved program of a Regional Entity, as applicable, or (2) the program, department or organization within NERC or a Regional Entity that is responsible for performing compliance monitoring and enforcement activities with respect to Registered Entities' compliance with Reliability Standards.

Violation Severity Levels

R#	Violation Severity Levels			
	Lower VSL	Moderate VSL	High VSL	Severe VSL
R1	The Transmission Operator 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 Transmission Operator 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 Transmission Operator 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 Transmission Operator 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 Transmission Operator 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.
R2	The Balancing Authority did not include two or fewer of the parts (Part 2.1 through Part 2.5) of the documented specification(s) for the data and information necessary for it to perform its analysis functions, Real-time monitoring, and Near-Term Energy Reliability Assessments.	The Balancing Authority did not include three of the parts (Part 2.1 through Part 2.5) of the documented specification(s) for the data and information necessary for it to perform its analysis functions, Real-time monitoring, and Near-Term Energy Reliability Assessments.	The Balancing Authority did not include four of the parts (Part 2.1 through Part 2.5) of the documented specification(s) for the data and information necessary for it to perform its analysis functions, Real-time monitoring, and Near-Term Energy Reliability Assessments.	The Balancing Authority did not include any of the parts (Part 2.1 through Part 2.5) of the documented specification(s) for the data and information necessary for it to perform its analysis functions, Real-time monitoring, and Near-Term Energy Reliability Assessments. OR, The Balancing Authority did not have a documented specification(s) for the data and information necessary for it

R#	Violation Severity Levels			
	Lower VSL	Moderate VSL	High VSL	Severe VSL
				to perform its analysis functions, Real-time monitoring, and Near-Term Energy Reliability Assessments.
For the Requirement R3 and R4 VSLs only, the intent of the drafting team 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.				
R3	The Transmission Operator did not distribute its Specification(s) to one entity, or 5% or less of the entities, whichever is greater, that have data and information required by the Transmission Operator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Transmission Operator did not distribute its Specification(s) 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 Transmission Operator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Transmission Operator did not distribute its Specification(s) 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 Transmission Operator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Transmission Operator did not distribute its Specification(s) to four or more entities, or more than 15% of the entities that have data and information required by the Transmission Operator's Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.
R4	The Balancing Authority did not distribute its Specification(s) to one entity, or 5% or less of the entities, whichever is greater, that have data and information required by the Balancing Authority's analysis functions, Real-time	The Balancing Authority did not distribute its Specification(s) to two entities, or more than 5% and less than or equal to 10% of the entities, whichever is greater, that have data and information required by the Balancing Authority's	The Balancing Authority did not distribute its Specification(s) to three entities, or more than 10% and less than or equal to 15% of the entities, whichever is greater, that have data and information required by the Balancing Authority's analysis functions, Real-time monitoring,	The Balancing Authority did not distribute its Specification(s) to four or more entities, or more than 15% of the entities that have data and information required by the Balancing Authority's analysis functions, Real-time monitoring, and Near-Term Energy Reliability Assessments.

R#	Violation Severity Levels			
	Lower VSL	Moderate VSL	High VSL	Severe VSL
	monitoring, and Near-Term Energy Reliability Assessments.	analysis functions, Real-time monitoring, and Near-Term Energy Reliability Assessments.	and Near-Term Energy Reliability Assessments.	
R5	The responsible entity receiving a specification(s) in Requirement R3 or R4 satisfied the obligations in the specification, but failed to meet one of the parts in Requirement R1, Part1.5 or Requirement R2, Part 2.5.	The responsible entity receiving a specification(s) in Requirement R3 or R4 satisfied the obligations in the specification, but failed to meet two of the parts in Requirement R1, Part 1.5 or Requirement R2, Part 2.5.	The responsible entity receiving a specification(s) in Requirement R3 or R4 satisfied the obligations in the specification, but failed to meet three or more of the parts in Requirement R1, Part 1.5 or Requirement R2, Part 2.5.	The responsible entity receiving a specification(s) in Requirement R3 or R4 did not satisfy the obligations of the documented specifications.

D. Regional Variances

None.

E. Interpretations

None.

F. Associated Documents

- 2022-02 Implementation Plan
- 2022-02 Technical Rationale

Version History

Version	Date	Action	Change Tracking
0	April 1, 2005	Effective Date	New
0	August 8, 2005	Removed "Proposed" from Effective Date	Errata
1		Modified R1.2 Modified M1 Replaced Levels of Non-compliance with the Feb 28, Board Of Trustees approved Violation Severity Levels (VSLs)	Revised
1	October 17, 2008	Adopted by NERC Board of Trustees	
1	March 17, 2011	Order issued by FERC approving TOP-003-1 (approval effective 5/23/11)	
2	May 6, 2012	Revised under Project 2007-03	Revised
2	May 9, 2012	Adopted by Board of Trustees	Revised
3	April 2014	Changes pursuant to Project 2014-03	Revised
3	November 13, 2014	Adopted by Board of Trustees	Revisions under Project 2014-03
3	November 19, 2015	FERC approved TOP-003-3. Docket No. RM15-16-000, Order No. 817	
4	February 6, 2020	Adopted by NERC Board of Trustees	Revisions under Project 2017-07
4	October 30, 2020	FERC approved TOP-003-4. Docket No. RD20-4-000	
5	May 2021	Changes pursuant to Project 2019-06	Revised
5	June 11, 2021	Board approved	Project 2019-06 Cold Weather
5	August 24, 2021	FERC approved TOP –003-5. Docket No. RD21-5-000, Order 176	
6	TBD	Adopted by NERC Board of Trustees	Revisions under project 2021-06
6.1	Errata	Approved by the Standards Committee	August 23, 2023
6.1	November 2, 2023	FERC Approved TOP-003-6.1. Docket No. RD23-6-000	
6.1	November 3, 2023	Effective Date	July 1, 2025
7	December 10, 2024	Board Adopted	Revisions under Project 2022-03
7	February 26, 2025	FERC approved TOP-003-7. Docket	

Version	Date	Action	Change Tracking
		No.RD25-5-000	
8	October 31, 2025	Adopted by the NERC Board of Trustees	Revisions to address FERC Order No. 901 directives
8	TBD	FERC approved	