

Agenda

Board of Trustees Meeting

December 10, 2024 | 3:00–4:30 p.m. Eastern

Virtual

Webinar: [Join Link](#)

Attendee Password: BOARDDEC2024ATT

Audio Only: 1-415-655-0002 US | 1-416-915 8942 Canada | Access Code: 2301 932 7454

NERC Board of Trustees

Kenneth W. DeFontes, Jr. - Chair

Suzanne Keenan – Vice Chair and Chair Elect

Colleen Sidford

Larry Irving

George S. Hawkins

Robin E. Manning

Jim Piro

Jane Allen

Robert G. Clarke

Susan Kelly

Kristine Schmidt

James B. Robb – President and Chief Executive Officer

Introduction and Chair's Remarks

[NERC Antitrust Compliance Guidelines](#)

Consent Agenda* – Approve

1. Minutes

- a. October 8, 2024 Open Meeting

2. Standing Committee Membership and Charter Amendments

- a. Compliance and Certification Committee Membership
- b. Reliability Issues Steering Committee Charter Amendments

Regular Agenda

3. Standards*

- a. Project 2023-04 Modifications to CIP-003 - **Adopt**
- b. Project 2023-07 – Transmission System Planning Performance Requirements for Extreme Weather - **Adopt**

- c. Project 2021-03 CIP-002 – **Adopt**
- d. Project 2022-03 Energy Assurance with Energy- Constrained Resources – **Adopt**
- e. 2025-2027 Reliability Standards Development Plan – **Approve**
- 4. Rules of Procedure Section 1600 Cold Weather Generator Data Request* – Authorize**
- 5. ERO Enterprise Long-Term Strategy* – Approve**
- 6. 2025 NERC Work Plan Priorities* – Approve**
- 7. Board of Trustees Compensation – Approve**
- 8. Board of Trustees New Meeting Cadence – Review**
- 9. Other Matters and Adjournment**

*Background materials included.

Draft Minutes Board of Trustees

October 8, 2024 | 11:30 a.m. – 12:00 p.m. Eastern

Hybrid Meeting

Barnsley Resort
597 Barnsley Gardens Rd NW
Adairsville, GA 30103

Webex

Call to Order

Mr. Kenneth W. DeFontes, Jr., Chair, called to order the duly noticed open meeting of the Board of Trustees (the Board) of the North American Electric Reliability Corporation (NERC or the Corporation) on October 8, 2024, at approximately 11:30 a.m. Eastern, and a quorum was declared present.

Present at the meeting were:

Board Members

Kenneth W. DeFontes, Jr., Chair
Suzanne Keenan, Vice Chair and Chair Elect
Jane Allen
Robert G. Clarke
George S. Hawkins
Larry Irving
Susan Kelly
Robin E. Manning
Jim Piro
James B. Robb, President and Chief Executive Officer
Kristine Schmidt
Colleen Sidford

NERC Staff

Tina Buzzard, Assistant Corporate Secretary
Jamie Calderon, Director, Standards Development
Manny Cancel, Senior Vice President and Chief Executive Officer of the E-ISAC
Mathew Duncan, Vice President, E-ISAC Security Operations and Intelligence
Howard Gugel, Vice President, Regulatory Oversight
Kelly Hanson, Senior Vice President and Chief Operating Officer
Fritz Hirst, Vice President, Government Affairs
Stan Hoptroff, Vice President, Business Technology
Soo Jin Kim, Vice President, Engineering and Standards
Mark G. Lauby, Senior Vice President and Chief Engineer
Kimberly Mielcarek, Vice President, Communications
Lauren Perotti, Assistant General Counsel

Sônia Rocha, Senior Vice President, General Counsel, and Corporate Secretary
Camilo Serna, Senior Vice President, Strategy and External Engagement
Andy Sharp, Vice President and Chief Financial Officer
Bluma Sussman, Vice President, E-ISAC Stakeholder Engagement
Tiffany Washington, Program Administrator

NERC Antitrust Compliance Guidelines

Ms. Buzzard directed the participants' attention to the NERC Antitrust Compliance Guidelines included in the advance agenda package and indicated that all questions regarding antitrust compliance or related matters should be directed to Ms. Rocha.

Introduction and Chair's Remarks

Mr. DeFontes welcomed the attendees to the meeting and introduced Mr. Robb to provide opening remarks. Mr. Robb remarked on the success of the stakeholder processes used to develop Reliability Standards responsive to the directives in Federal Energy Regulatory Commission ("FERC") Order No. 901, including the technical conference convened under Section 321 of the NERC Rules of Procedure to develop the IBR ride-through standards. He thanked NERC stakeholders for their work addressing these important reliability issues.

Consent Agenda

Upon motion duly made and seconded, the Board approved the consent agenda as follows:

Minutes

The draft minutes for the August 15, 2024 meeting were approved as presented to the Board at this meeting.

Reliability and Security Technical Committee Proposed Charter Amendments

WHEREAS, the Reliability and Security Technical Committee ("RSTC") developed revisions to its Charter to address concerns with respect to balanced sector membership;

WHEREAS, the Corporate Governance and Human Resources Committee ("CGHRC"), by action without a meeting dated September 16, 2024, approved and recommended Board approval of the revised RSTC Charter;

NOW, THEREFORE, BE IT RESOLVED, that the Board, upon recommendation of the CGHRC, hereby approves the revised RSTC Charter, substantially in the form presented to the Board at this meeting, to replace the charter approved by the Board on February 15, 2024.

Reliability Standards

Project 2020-06 Verifications of Models and Data for Generators

Ms. Kim presented the proposed definition of "Inverter-Based Resource (IBR)." Upon motion duly made and seconded, the Board approved the following resolutions:

RESOLVED, that the Board hereby adopts the proposed definition of Inverter-Based Resource (IBR), as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the associated implementation plan for the proposed definition, as presented to the Board at this meeting.

FURTHER RESOLVED, that NERC management is hereby authorized to make the appropriate filings with ERO governmental authorities and take such further actions and make such further filings as are necessary and appropriate to effectuate the intent of the foregoing resolutions.

Project 2020-02 Modifications to PRC-024 (Generator Ride-through)

Ms. Kim presented the proposed Reliability Standards for generator ride-through performance, highlighting that the development of proposed Reliability Standard PRC-029-1 was completed using the special rules provided in Section 321 of the NERC Rules of Procedure. She remarked that, due to a supporting technical memorandum being posted later in the already shortened ballot period, NERC management extended the ballot such that the process completed five days past the 45 day deadline provided in the NERC Rules of Procedure. Ms. Kim requested the Board ratify this extension for good cause shown.

After discussion, and upon motion duly made and seconded, the Board approved the following resolutions:

WHEREAS, on October 19, 2023, the Federal Energy Regulatory Commission (FERC) issued a final rule, Order No. 901, directing the development of new or revised Reliability Standards to address reliability issues associated with the growth of inverter-based resources (IBR) on the Bulk-Power System (BPS), and directing that NERC submit such standards to FERC on a three-year staggered timeframe;

WHEREAS, FERC directed that new or revised Reliability Standards addressing IBR performance requirements, among other topics, be submitted by November 4, 2024;

WHEREAS, the Board, at its August 15, 2024 meeting, found it necessary and appropriate to employ the special processes described in Sections 321.2 – 321.4 of the NERC Rules of Procedure to develop proposed draft standards that are responsive to the IBR performance matters identified in the directives issued by FERC in Order No. 901;

WHEREAS, the Board directed the Standards Committee to work with NERC staff to carry out the actions specified in Section 321.2 of the NERC Rules of Procedure, with a re-ballot to be completed within 45 days of the Board's action, or by September 30, 2024;

WHEREAS, the specified actions were completed, and a revised draft of proposed Reliability Standard PRC-029-1 was posted for a re-ballot originally scheduled to end September 30, 2024;

WHEREAS, NERC Management determined to extend the re-ballot until October 4, 2024, which is five days beyond the 45-day period contemplated in Section 321.2.1, to allow stakeholders additional time to review the supporting materials posted later in the re-ballot period;

WHEREAS, the Board, after considering that this extension was undertaken to advance due process in the conduct of Section 321 with no harm expected to the interests of any of NERC's stakeholders, has determined to ratify this extension for good cause shown;

WHEREAS, the revised draft of proposed Reliability Standard PRC-029-1 Frequency and Voltage Ride-through Requirements for Inverter-based Resources achieved a greater than two-thirds majority vote of the weighted Segment votes cast, with a quorum established, meeting the requirements for consideration under Section 321.3 of the NERC Rules of Procedure;

WHEREAS, the proposed Reliability Standard PRC-024-5, a companion standard to proposed Reliability Standard PRC-029-1, achieved a greater than two-thirds majority vote of the weighted Segment votes cast, with a quorum established, successfully completing development under the usual standard development processes provided in Appendix 3A to the NERC Rules of Procedure, *Standard Processes Manual*;

WHEREAS, the Board expresses its sincere appreciation to the Standards Committee and NERC’s stakeholders for their hard work and focused efforts to address the important reliability matter of IBR performance in accordance with the timeline specified by FERC in Order No. 901;

NOW, THEREFORE, BE IT RESOLVED, the Board hereby adopts the proposed Reliability Standards and supporting documents as follows:

Proposed Reliability Standard PRC-029-1

RESOLVED, that the Board hereby adopts the proposed Reliability Standard PRC-029-1, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

Proposed Reliability Standard PRC-024-4

RESOLVED, that the Board hereby adopts the proposed Reliability Standard PRC-024-4, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the proposed retirement of Reliability Standard PRC-024-3, as presented to the Board at this meeting.

Definition for Inclusion in the Glossary of Terms used in NERC Reliability Standards

RESOLVED, that the Board hereby adopts the proposed definition of Ride-through, as presented to the Board at this meeting.

Implementation Plan

RESOLVED, that the Board hereby approves the associated implementation plan for the above-listed standards and definitions, as presented to the Board at this meeting.

Authorization and Further Action

FURTHER RESOLVED, that NERC management is hereby authorized to make the appropriate filings with ERO governmental authorities and take such further actions and make such further filings as are necessary and appropriate to effectuate the intent of the foregoing resolutions.

Mr. DeFontes thanked stakeholders for their work on this important project, including their participation in the Section 321 process.

Project 2021-04 Modifications to PRC-002

Ms. Kim presented the proposed Reliability Standards for disturbance monitoring. Upon motion duly made and seconded, the Board approved the following resolutions:

Proposed Reliability Standard PRC-002-5

RESOLVED, that the Board hereby adopts the proposed Reliability Standard PRC-002-5, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the proposed retirement of Reliability Standard PRC-002-4, as presented to the Board at this meeting.

Proposed Reliability Standard PRC-028-1

RESOLVED, that the Board hereby adopts the proposed Reliability Standard PRC-028-1, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

Implementation Plan

RESOLVED, that the Board hereby approves the associated implementation plan for the above-listed standards, as presented to the Board at this meeting.

Authorization and Further Action

FURTHER RESOLVED, that NERC management is hereby authorized to make the appropriate filings with ERO governmental authorities and take such further actions and make such further filings as are necessary and appropriate to effectuate the intent of the foregoing resolutions.

Project 2023-02 Analysis and Mitigation of BES Inverter-Based Resource Performance Issues

Ms. Kim presented the proposed Reliability Standard for addressing IBR performance issues. Upon motion duly made and seconded, the Board approved the following resolutions:

RESOLVED, that the Board hereby adopts the proposed Reliability Standard PRC-030-1, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the associated implementation plan for the proposed Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that NERC management is hereby authorized to make the appropriate filings with ERO governmental authorities and take such further actions and make such further filings as are necessary and appropriate to effectuate the intent of the foregoing resolutions.

At the conclusion of the presentations, Ms. Kim remarked on the status of development to address the FERC Order No. 901 “Milestone 3” directives due November 2025, noting that a technical conference is planned for Winter 2025. She also remarked on efforts underway to develop lessons learned from the “Milestone 2” projects to guide standards development going forward.

Other Matters and Reports

There being no further business, and upon motion duly made and seconded, the meeting was adjourned.

Submitted by,



Sônia Rocha
Corporate Secretary

Compliance and Certification Committee Membership

Action

Approve

Background

On June 6, 2024, the Compliance and Certification Committee (CCC) Nominating Subcommittee issued its annual request for nominations for terms beginning January 1, 2025 through December 31, 2027.¹

Consistent with the CCC Charter and CCC procedures, the CCC Nominating Subcommittee uses the following criteria when selecting nominees:

- Senior-level industry expertise;
- Knowledge of topics within the scope of the CCC;
- Experience within their respective organizations in at least one of the following areas:
 - Compliance Administration
 - Compliance Enforcement
 - Risk Management
 - NERC Registration
 - NERC Certification
 - NERC Standards;
- Geographical representation;
- Adherence to CCC expectations (if applicable);
- Participation in other ERO committees, trade organizations, membership organizations (NATF, NAGF, etc.), or regional forums;
- Input from the CCC Executive Committee;
- The nominator's and nominee's organizations' status as:
 - A NERC member,
 - A NERC registered entity,
 - A registered entity-sponsored industry/trade organization,
 - A provider of professional services to NERC registered entities;
- Nominee's qualifications to current posting;
- Only one nomination per entity/organization (including affiliates);

¹ Following NERC Board of Trustees (Board) approval

- The nominee’s entity/organization does not already have a member on the CCC; and
- If a nomination is received from another entity/organization, then confirm nominee’s willingness to serve.

Summary

The CCC Nominating Subcommittee met on July 23, 2024 and September 27, 2024 to consider 14 nominees. After discussion, the CCC Nominating Subcommittee was in consensus to recommend the following nominees for Board approval:

- Sector 1, Investor-Owned Utility – Daniela Hammons, CenterPoint Energy. Ms. Hammons is an existing member of the CCC and serves as the Chair of the ERO Monitoring Subcommittee (EROMS).
- Sector 3, Cooperative Utility – Scott Brame, North Carolina Electric Membership Corporation. Mr. Brame is an existing member of the CCC.
- Sector 4, Federal/Provincial Utility/Federal Power Marketing Administration – Kimberly Bentley, Western Area Power Administration. Ms. Bentley was the only eligible nominee for the Sector 4 position.
- Sector 6, Merchant Electricity Generator – Lauren Price, Arevon Energy, Inc. Ms. Price was the only eligible nominee for Sector 6.
- Sector 7, Electricity Marketer – This position was converted to At-large as there was not an eligible nomination received for this Sector. The term for the converted position is January 1, 2025 – December 31, 2027.
- Sector 10, ISO/RTO – Greg Campoli. Mr. Campoli, New York ISO. Mr. Campoli is an existing member of the CCC.
- Member At-large:
 - Robert Hirchak, Cleco. Mr. Hirchak previously held the Sector 7 position which was converted to At-large during the NS review. Additionally, Mr. Hirchak is the existing Vice Chair of the Organization Registration and Certification Subcommittee (ORCS).
 - Lisa Milanes, California ISO. Ms. Milanes is an existing member of the CCC. Additionally, Ms. Milanes is the existing Chair of the Nominating Subcommittee.
 - Frank Owens, Rayburn Electric. Mr. Owens was selected based on his experience and participation in trade organizations and other NERC/ERO forums. Mr. Owens also brings balance to the CCC due to his organization’s geographical location in the Electric Reliability Council of Texas (ERCOT) interconnection.

Proposed Amendments to the RISC Charter

Action

Approve

Summary

At their November 2024 meeting the Reliability Issues Steering Committee (RISC) approved revisions to its Charter and recommended the Corporate Governance and Human Resources Committee (CGHRC) review and approval. On December 9, 2024 the CGHRC will consider the RISC Charter for approval and recommendation to the Board of Trustees for approval. The revisions include certain administrative and clarifying improvements that further support the efficient operation of the Committee.

The proposed amendments can be viewed in the redline document that is included the CGHRC open meeting package available [here](#).

Project 2023-04 Modifications to CIP-003

Action

Adopt the following standards documents and authorize staff to file with applicable regulatory authorities:

- Reliability Standard – CIP-003-11 – Cyber Security – Security Management Controls
[\[CIP-003-11 Standard\]](#) [\[Redline to last approved\]](#)
- Implementation Plan
[\[CIP-003-11 Implementation Plan\]](#)
- Violation Risk Factors (VRFs) and Violation Severity Levels (VSLs)
[\[VRF/VSL Justification\]](#)
- Retirements
[\[CIP-003-11 would retire the currently effective version of CIP-003-10 – Cyber Security – Security Management Controls¹, or the currently effective version of CIP-003-9\]](#)

Background

NERC initiated Project 2023-04 Modifications to CIP-003 in response to recommendations from the Low Impact Criteria Review Team (LICRT). The NERC Board of Trustees formed the LICRT in 2021 to consider the potential threat and risk posed by a coordinated cyber-attack on low impact Bulk Electric System (BES) Cyber Systems. In its report, the LICRT documented the results of the review and analysis of the degrees of risk presented by various facilities that meet the criteria that define low impact cyber facilities and recommended actions to address those risks. The recommendations included recommendations to revise Reliability Standards, develop security guidelines, and perform risk monitoring. The NERC Board of Trustees accepted the LICRT's report at its November 2022 meeting and asked that the recommendations in the report be initiated.

In March 2023, the Standards Committee accepted the Standard Authorization Request (SAR) developed to address the LICRT recommendations for standards modifications. Project 2023-04 proposes merging Sections 3 and 6 of CIP-003, Attachment 1 to consolidate all electronic access requirements. These revisions are captured in Reliability Standard CIP-003-11. The CIP-003-11 changes were made to the most recent NERC Board of Trustees approved version of CIP-003, CIP-003-10, developed by Project 2016-02 (Modifications to CIP Standards) (Virtualization Revisions). Proposed CIP-003-10 has been filed with the applicable governmental authorities and is pending approval.

Summary

Proposed Reliability Standard CIP-003-11 revises Reliability Standard CIP-003-10 to address the recommendations of the LICRT by removing Requirement R1 Part 1.2.6 and revising Attachment 1. The revised Attachment 1 Section 3 covers all aspects of electronic access controls and includes controls to:

¹ CIP-003-10 was filed with FERC on July 10, 2024 and is pending FERC approval.

- Permit only necessary inbound and outbound electronic access;
- Detect known, suspicious or malicious communications;
- Authenticate users prior to permitting access;
- Protect user authenticated information for user- initiated electronic access; and
- Include methods for determining and disabling vendor electronic access.

Standards Development Process

The initial 45-day formal comment and ballot was conducted from October 24 – December 7, 2023. The initial CIP-003-a² ballot received 35.04% approval and 92.81% quorum. The implementation plan received 40.86% approval and 92.15% quorum. The drafting team made additional changes to the standard based on comments received.

A 45-day formal comment and second ballot for CIP-003-11 was conducted January 30 – March 30, 2024. The second draft, the CIP-003-11 standard, received 60.34% approval and 91.10% quorum. The implementation plan received 60.95% approval and 90.78% quorum.

The 30-day formal comment and third ballot was conducted from June 12 – July 11, 2024.³ The CIP-003-11 and CIP-003-12 combined ballot received 80.58% approval and 79.11% quorum. The implementation plan received 64.01% approval and 78.84% quorum.

The 30-day formal comment and fourth ballot was conducted from September 11 – October 10, 2024. The CIP-003-11 ballot received 93.89% approval and 87.67% quorum. The implementation plan received 93.44% approval and 87.03% quorum. Nonbinding polls were conducted concurrently with each of the formal comment periods and ballots; the nonbinding polls for the VRFs and VSLs for the fourth additional ballot received 92.75% supportive opinions and 85% quorum.

As permitted under the 2023 changes to Section 4.13 of the Standard Processes Manual, the project was concluded without a final ballot being conducted.⁴ Public notice was provided of the conclusion of the project on November 13, 2024.

Minority Issues

None

Pertinent FERC Directives

None

² CIP-003-a was used as a placeholder during development because both Project 2023-04 and Project 2016-02 were simultaneously revising CIP-003. CIP-003-a was assigned its final version number, CIP-003-11, once the Project 2016-02 revisions were approved by the NERC Board of Trustees as CIP-003-10 on May 9, 2024.

³ Under the Standard Processes Manual, section 4.12: Consideration of Comments and additional ballots, “Subsequent formal comment periods may be as few as 30 days, with ballots and nonbinding polls conducted during the last 10 days.” [FINAL - ROP Appendix 3A SPM v5 \(nerc.com\)](#)

⁴ Under the Standard Process Manual, Section 4.13: Conduct Final Ballot or Conclude the Standards Action, The drafting team may conclude the standards action without conducting a final ballot if: (1) the previous ballot achieved at least 85% weighted segment approval; (2) the drafting team made a good faith effort at resolving applicable objections; (3) the drafting team responded in writing to comments as required by section 4.12; and (4) the drafting team is proposing no further changes to the balloted documents. [FINAL - ROP Appendix 3A SPM v5 \(nerc.com\)](#)

Cost Effectiveness

The drafting team sought stakeholder input on the cost effectiveness of the proposed standards during the formal comment periods. Several comments argued that substantial capital investment and additional staffing will be needed because of an increase in requirements for low impact assets. The drafting team believes the proposed changes are suitable and cost-effective, given the necessity to protect the reliability of a low impact BES Cyber System against compromise and the flexibility provided in the standard for the industry to implement changes with widely used industry tools and practices.

Additional Information

A link to the project history and files is included here for reference:

[\[Project 2023-04 Modifications to CIP-003\]](#)

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NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Standards Actions

Project 2023-04 Modifications to
CIP-003

Soo Jin Kim, Vice President, Engineering, Standards, and PRISM
Board of Trustees Meeting
December 10, 2024



- Reliability Benefits
 - Puts controls in place to protect low-impact assets by:
 - Authenticating remote users
 - Protect the authentication information in transit
 - Detect malicious communication assets

- Action
 - Adopt
 - Reliability Standard – CIP-003-11 - Cyber Security – Security Management Controls





Questions and Answers

Project 2023-07 Transmission System Planning Performance Requirements for Extreme Weather

Action

Adopt the following standard documents and authorize staff to file with the applicable regulatory authorities [*final materials to be posted December 2, 2024*]:

- Reliability Standard – TPL-008-1 Transmission System Planning Performance Requirements for Extreme Temperature Events
[\[TPL-008-1 Standard\]](#)
- Proposed New Definition for inclusion in the Glossary of Terms used in NERC Reliability Standards
[\[Extreme Temperature Assessment\]](#)
- Implementation Plan
[\[Implementation Plan\]](#)
- Violation Risk Factors (VRFs) and Violation Severity Levels (VSLs)
[\[VRF VSL Justification – TPL-008-1\]](#)

Background

On June 15, 2023, the Federal Energy Regulatory Commission (FERC) issued Order No. 896, a final rule directing NERC to develop a new Reliability Standard or modifications to Reliability Standard TPL-001-5.1 that would address concerns pertaining to transmission system planning for extreme heat and extreme cold temperature events.¹

In summary, FERC directed NERC to require the following in its new or revised standard:

1. The development of benchmark planning cases based on major prior extreme heat and cold weather events and/or meteorological projections;
2. Planning for extreme heat and cold weather events using steady-state and transient stability analyses expanded to cover a range of extreme weather scenarios including the expected resource mix's availability during extreme heat and cold weather conditions, and the wide-area impacts of extreme heat and cold weather;
3. Development of corrective action plans that mitigate any instances where performance requirements for extreme heat and cold weather events are not met.

FERC directed NERC to submit the new or modified Reliability Standard within 18 months of the date of publication of the final rule in the Federal Register, which is December 23, 2024.

¹ Order No. 896, *Transmission System Planning Performance Requirements for Extreme Weather*, 183 FERC ¶ 61,191 (2023).

Project 2023-07 developed proposed Reliability Standard TPL-008-1 Transmission System Planning Performance Requirements for Extreme Temperature Events to address the FERC directives in Order 896.

Summary

Proposed Reliability Standard TPL-008-1 – Transmission System Planning Performance Requirements for Extreme Temperature Events is a new Reliability Standard, developed in response to Order No. 896, focused specifically on improving how Planning Coordinators and Transmission Planners plan for the potential impacts of extreme heat and extreme cold temperature events on the Reliable Operation of the Bulk-Power System.

The proposed Reliability Standard consists of a framework, consisting of 11 requirements, for the performance of periodic studies assessing the wide-area impacts of extreme heat and extreme cold temperature events on the Bulk-Power System. These periodic studies are referred to as Extreme Temperature Assessments. Proposed Reliability Standard TPL-008-1 would require planning entities in a planning zone, defined in Attachment 1 to the standard, to coordinate with each other on the development of Extreme Temperature Assessments.

The proposed standard includes several key requirements. First, it addresses the need for coordination among planning entities. Second, it establishes guidelines for creating consistent benchmark temperature events and planning scenarios based on those benchmark temperatures. Additionally, the standard outlines requirements for conducting both steady-state and transient stability analyses, including sensitivity cases.

Furthermore, it mandates that entities develop Corrective Action Plans in specific situations where system performance does not meet established requirements. These entities are also required to share their Corrective Action Plans with other relevant organizations that have a need for reliability information, as well as with the applicable regulatory authorities or governing bodies responsible for retail service issues in their jurisdictions.

Proposed Reliability Standard TPL-008-1 addresses a reliability gap in the currently effective transmission planning Reliability Standards, is responsive to the Commission’s directives in Order No. 896, and would advance the reliability of the Bulk-Power System by improving how entities plan for the impacts of extreme temperature events on their systems.

Standards Development Process

The Standards Committee (SC) accepted the standards authorization request at its July 19, 2023, meeting. On October 18, 2023, the SC seated the 2023-07 drafting team (DT). Due to the FERC deadline, the SC approved a waiver under Section 16.0 of the Standard Processes Manual on December 13, 2023, to reduce the initial formal comment and ballot period from 45 days to as few as 25 days, reduce any additional formal comment and ballot period(s) from 45 days to as few as 15 days, and reduce the final ballot from 10 days to 5 days.

For the initial posting, the DT proposed a new Reliability Standard TPL-008-1. A proposed draft of TPL-008-1 and the associated Implementation Plan were posted for an initial formal comment period and ballot from March 20–May 3, 2024. The initial draft for TPL-008-1 received 18.69% approval and quorum of 88.22%. The initial draft Implementation Plan received 30.03% approval and quorum of 87.9%.

A revised draft of proposed Reliability Standard TPL-008-1 and the associated Implementation Plan were posted for an additional formal comment period and ballot from July 16 – August 22, 2024. The ballot was extended by four days to reach quorum and received 18.17% approval and quorum of 87.9%. The draft Implementation Plan received 31.97% approval and quorum of 87.58%.

A second revised draft of proposed Reliability Standard TPL-008-1 and the associated Implementation Plan were posted for an additional formal comment period and additional ballot from October 7–21, 2024. The second additional ballot received 51.9% approval and quorum of 84.39%. The draft Implementation Plan received 63.34% approval and quorum of 84.08%.

A third revised draft of proposed Reliability Standard TPL-008-1 and the associated Implementation Plan were posted for an additional formal comment period and ballot from November 4–21, 2024. The third additional ballot passed with an approval rating of 51.9% and quorum of 84.39%. The draft Implementation Plan received a 63.34% approval and quorum of 84.08%.

Nonbinding polls were conducted concurrently with each of the formal comment periods and ballots.

Reliability Standard TPL-008-1 and the associated Implementation Plan will be posted for a final ballot from December 2–6, 2024. The results of both ballots can be found on the project page and will be reviewed with the Board at the meeting.

Minority Issues

Some entities expressed concern about being able to locate and identify all the Planning Coordinators within its zone for the purpose of carrying out the required coordination under the TPL-008-1 standard. Multiple resources were provided to entities, such as, a list of registered Planning Coordinators that are posted publicly under Registration and Certification on the NERC website. It was also encouraged for Planning Coordinators to reach out to their respective Regional Entity(ies) or the larger Planning Coordinators within its zone, as they may already be aware of all Planning Coordinators.

Pertinent FERC Directives

FERC Order 896 paragraphs 35, 39, 40 50, 58, 60, 72, 76, 77, 88, 111, 112, 116, 124, 134, 138, 152, 157, 165, 188, and 193.

Additional Information

A link to the project history and files is included here for reference:

[Project 2023-07 Transmission System Planning Performance Requirements for Extreme Weather](#)

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Standards Actions

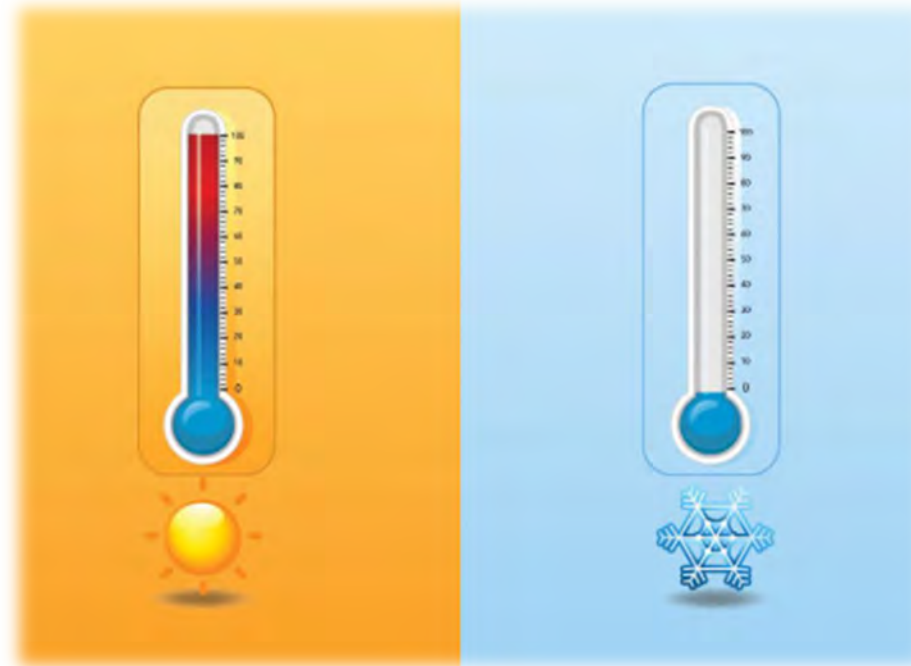
Project 2023-07 Extreme Heat and Extreme Cold Weather

Soo Jin Kim, Vice President, Engineering, Standards, and PRISM
Board of Trustees Meeting
December 10, 2024

- Addresses FERC Order 896
- Ballot Results
- Reliability Benefit
 - Planning entities are better prepared for the impact of extreme heat and extreme cold temperatures on the transmission system



- Action – Adopt
 - TPL-008-1
 - Defined Term – Extreme Temperature Assessment





Questions and Answers

Project 2021-03 CIP-002

Action

Adopt the following standards documents and authorize staff to file with applicable regulatory authorities:

- Reliability Standard – CIP-002-8 – Cyber Security – BES Cyber System Categorization
[\[CIP-002-8 Standard\]](#) [\[Redline to last approved\]](#)
- Implementation Plan
[\[CIP-002-8 Implementation Plan\]](#)
- The Violation Risk Factors (VRFs) and Violation Severity Levels (VSLs)¹
[\[CIP-002-8 Standard\]](#) [\[Redline to last approved\]](#)
- Retirements
[\[CIP-002-7– Cyber Security – BES Cyber System Categorization\]](#)

Background

Project 2021-03 is assigned four separate Standard Authorization Requests (SARs) that address modifications to CIP-002. The currently proposed revisions to CIP-002 are in response to a portion of one of the four SARs, the Project 2016-02 SAR, which seeks to modify Reliability Standard CIP-002 to address the categorization of certain Transmission Owner Control Centers (TOCC) performing Transmission Operator (TOP) functions as medium impact based on an aggregate weighted value of their Bulk Electric System (BES) Transmission Lines in Criterion 2.12 of Attachment 1.² The Standards Committee (SC) assigned a portion of the 2016-02 SAR to the Project 2021-03 Drafting Team (DT) at its March 17, 2021 meeting.

On February 4, 2021, the NERC Board of Trustees (Board) directed NERC staff to study whether the applicability of the Critical Infrastructure Protection (CIP) Reliability Standards adequately address Control Centers. In response to this directive and the scope of the 2016-02 SAR, the DT initiated a field test, consistent with Section 6.0 of the Standards Process Manual. The SC approved the Project 2021-03 [Field Test Plan](#) on November 17, 2021. Three field tests were conducted in 2022 and the [final report](#) was posted to the project page in January 2023.

The CIP-002 TOCC field test found that many Transmission Owners (TOs) struggled with how to interpret the Control Center definition. While the current Control Center definition does not specifically identify TOs, a TO may have a Control Center through its ability to monitor and control the BES in Real-time to perform the reliability tasks of a TOP. The field test found the following:

¹ The Violation Risk Factors (VRFs) and Violation Severity Levels (VSLs) have not been materially changed from the most recent NERC Board of Trustees-approved version.

² Revisions to address the other three SARs will be submitted once they are completed.

- Lack of a common understanding of the term “control” versus “authority” as it relates to TOPs;
- Lack of a common understanding of the term “perform the functional obligations of the TOP” as stated in Attachment 1 of CIP-002-5.1a; and
- Lack of a common understanding of the term “associated data centers” versus TO BES Cyber Assets capable of controlling transmission Facilities.

In response to the SAR, Project 2021-03 proposes modifications to the Control Center definition and Attachment 1 in proposed Reliability Standard CIP-002-8. The CIP-002-8 changes were made to the most recent Board approved version, CIP-002-7.

Summary

Project 2021-03 proposes modifications to the Control Center definition and Attachment 1. The proposed revisions to the Control Center definition expand it to include certain TO’s that have the ability to control transmission Facilities.

Attachment 1 was revised to remove references to the “functional obligations” of the different Registered Entities and replace them with references to the reliability tasks performed by those same Registered Entities. This change was made because the NERC Functional Model is no longer being actively maintained and to align with the language used in the Control Center definition.

Significant revisions were made to Criterion 2.12 of Attachment 1 regarding the total aggregate weighted value that is used to account for the impact on the BES. An exclusion clause has been provided to allow Responsible Entities to appropriately categorize their BES Cyber Assets at Control Centers at a level that is commensurate with the associated risk for local systems having limited flow-through or generation export and are primarily designed to serve load. A bright line of 75 MWh was selected to align with pre-existing criteria including the registration criteria for a Distribution Provider, and the registration criteria for a Generator Owner. Establishing a threshold is intended to differentiate between non-impactful load serving areas and areas that are more likely to have an impact on the interconnected BES.

The VRFs and VSLs have not been materially changed from the most recent Board approved version.

Standards Development Process

The initial 45-day formal comment and ballot was conducted from October 31 – December 9, 2023. The initial CIP-002-Y³ ballot failed to garner ballot body approval and received 32.54% approval with an 88.89% quorum. The Implementation Plan received 42.55% approval with a 90.69% quorum. The non-binding poll received 34.22% approval with an 88.13% quorum.

An additional ballot was conducted April 2 – May 16, 2024. The additional ballot failed to obtain ballot body approval and received 47.72% approval with an 88.55% quorum. The Implementation Plan received 58.73% approval with an 88.28% quorum. The non-binding poll received 34.22% approval with a quorum of 88.13%. The non-binding poll received 54.44% approval with an 87.05% quorum.

³ CIP-002-Y was used as a placeholder during development because both Project 2021-03 and Project 2016-02 were simultaneously revising CIP-002. The final version number, CIP-002-8, was assigned to Project 2021-03 once the Project 2016-02 revisions were approved by the NERC Board of Trustees as CIP-002-7 on May 9, 2024.

A second additional ballot was conducted from August 29 – October 15, 2024, for proposed Reliability Standard CIP-002-8 receiving an 83.05% approval with an 88.89% quorum. The Implementation Plan received 89.07% approval with an 88.28% quorum. The non-binding poll received 80.11% approval with an 85.61% quorum.

The final ballot was conducted from November 13 – 22, 2024. The results can be found on the project page and will be reviewed with the Board at the meeting.

Minority Issues

None

Pertinent FERC Directives

None

Cost Effectiveness

None

Additional Information

A link to the project history and files is included here for reference:

[\[Project 2021-03 CIP-002 \(nerc.com\)\]](https://www.nerc.com/Project/2021-03-CIP-002)

Standards Actions

Project 2021-03 CIP-002

Soo Jin Kim, Vice President, Engineering, Standards, and PRISM
Board of Trustees Meeting
December 10, 2024

- Reliability Benefits

- Address the proper identification of Transmission Owner Control Centers performing the functional obligations of a Transmission Operator, specifically those that meet medium impact criteria.



- Action

- Adopt

- Reliability Standard – CIP-002-8 - Cyber Security – BES Cyber System Categorization
 - Revised Control Center definition





Questions and Answers

Project 2022-03 Energy Assurance with Energy-Constrained Resources

Action

Adopt the following standard documents and authorize staff to file with the applicable regulatory authorities:

- Reliability Standard – BAL-007-1 Energy Assurance
[\[BAL-007-1 Standard\]](#)
- Reliability Standard – TOP-003-7
[\[TOP-003-7 Standard\]](#)
- Proposed New Definitions for inclusion in the Glossary of Terms used in NERC Reliability Standards
[\[Energy Reliability Assessment\]](#)
[\[Near-Term Energy Reliability Assessment\]](#)
- Implementation Plan
[\[Implementation Plan\]](#)
- Violation Risk Factors (VRFs) and Violation Severity Levels (VSLs)
[\[VRF VSL Justification – BAL-007-1 and TOP-003-7\]](#)
- Retirement
[\[Reliability Standard TOP-003-6.1 – Transmission Operator and Balancing Authority Data and Information Specification and Collection\]](#)

Background

Fuel assurance and forward energy supply planning are increasingly important as the Bulk Electric System transitions from coal and nuclear resources to wind, solar, natural gas, and hybrid resources. Operational uncertainty is increasing due to conditions under which fuel is unavailable. For this reason, the Reliability and Security Technical Committee (RSTC) formed the Energy Reliability Assessment Task Force (ERATF) to assess risks associated with energy constrained resources.

The ERATF was established to analyze and collaborate with stakeholders on the issues outlined in the "Ensuring Energy Adequacy with Energy-Constrained Resources" whitepaper¹. The ERATF identified concerns regarding energy sufficiency in the areas of operations, operational planning, and mid- to long-term planning time frames. Furthermore, the ERATF examined the existing NERC Reliability Standards to assess whether there is a requirement for conducting energy reliability assessments. Based on this review, the ERATF developed a technical justification document that proposed enhancements to the NERC Reliability Standards.

¹ Link to: [Energy Adequacy White Paper](#)

Summary

The purpose of Project 2022-03 Energy Assurance with Energy-Constrained Resources is to develop Reliability Standards to enhance reliability by requiring entities to perform Energy Reliability Assessments (ERAs) to evaluate energy assurance and develop Operating Plan(s) to address identified risks. The Drafting Team developed a new Reliability Standard, BAL-007-1, to require Balancing Authorities to perform ERAs to assess forecasted Energy Emergencies in the near-term time horizon and develop plans to address any such forecasted Energy Emergencies. The Drafting Team also developed modifications to a new version of the TOP-003 Reliability Standard, TOP-003-7, to ensure that Balancing Authorities have the authority to collect the data needed to perform the Near-Term ERAs.

Standards Development Process

On January 25, 2023, the Standards Committee accepted the Standards Authorization Request. The proposed Reliability Standard BAL-007-1 was posted for an initial 45-day formal comment and ballot period from January 25 – March 11, 2024, and received 6.08% approval and quorum of 89.81%. The initial draft Implementation Plan received 11.58% approval and quorum of 89.49%. The non-binding poll for the Violation Risk Factors (VRFs) and Violation Severity Levels (VSLs) received 5.49% approval with an 86.59% quorum.

A revised draft of proposed Reliability Standard BAL-007-1 was posted for an additional formal comment and ballot period from May 7 – June 24, 2024. The ballot period was extended by four days to meet quorum and received 17.19% approval and quorum of 81.89%. The revised draft Implementation Plan received 19.04% approval and a quorum of 81.71%. The non-binding poll for the VRFs and VSLs received 10.37% supportive opinions with a 79.27% quorum.

A revised draft of proposed Reliability Standard BAL-007-1 was posted for an additional formal comment and ballot period from September 19 – November 4, 2024, and passed with an approval rating of 81.53% and quorum of 87.92%. The Implementation Plan for BAL-007-1 passed ballot with 83.72% and quorum of 88.33%. The non-binding poll for the VRFs and VSLs received 79.61% supportive opinions with an 85.77% quorum.

Proposed Reliability Standard TOP-003-7 was posted for an initial formal comment and ballot period from September 19 – November 4, 2024, and passed ballot with 92.77% approval and a quorum of 85.38%. The Implementation Plan for TOP-003-7 passed ballot with 76.3% and quorum of 85.83%. The non-binding poll for the VRFs and VSLs received 86.09% supportive opinions with an 84.36% quorum.

Reliability Standards BAL-007-1 and TOP-003-7 and the associated Implementation Plan were posted for a final ballot November 25 – December 6, 2024. The results of the ballots will be reviewed with the Board at the meeting.

Minority Issues

A small minority of entities find this standard to be an administrative burden in nature and do not agree with the proposed Reliability Standard BAL-007-1.

Cost Effectiveness

The drafting team sought stakeholder input on the cost effectiveness of the proposed Reliability Standards (BAL-007-1 and TOP-003-7) during the formal comment periods. Some commenters

felt the BAL-007-1 Reliability Standard would be administrative in nature by requiring registered entities to hire additional staff to address the requirements of the standards, respectively.

Additional Information

A link to the project history and files is included here for reference:

[Project 2022-03 Energy Assurance with Energy-Constrained Resources](#)

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RELIABILITY CORPORATION

Standards Actions

Project 2022-03 Energy Assurance

Soo Jin Kim, Vice President, Engineering, Standards, and PRISM
Board of Trustees Meeting
December 10, 2024

- Ballot Results
- Reliability Benefit
 - Enhance reliability by requiring entities to perform Energy Reliability Assessments (ERAs) to evaluate energy assurance and develop Corrective Action Plan(s), Operating Plan(s), or other mitigating actions to address identified risks to operations time horizon.



Action – Adopt

- BAL-007-1
- TOP-003-7
- Defined Terms
 - Energy Reliability Assessment
 - Near-Term Reliability Energy Assessment





Questions and Answers

2025-2027 Reliability Standards Development Plan

Action

Approve the 2025-2027 Reliability Standards Development Plan (RSDP) and authorize NERC staff to file with the applicable regulatory authorities.

Background

Pursuant to section 310 of the NERC Rules of Procedure, NERC is required to develop and provide an annual RSDP to the applicable governmental authorities. The 2025-2027 RSDP includes time frames and anticipated resources for each project under development or anticipated to begin by the end of the year.

A draft RSDP was posted for a public comment period from August 22 – September 20, 2024. The Standards Committee (SC) endorsed the RSDP at its October 16, 2024 meeting.

In the event a Standard Authorization Request or FERC directive is received prior to submitting the RSDP to the applicable governmental authorities, the document will be updated appropriately. NERC and the SC will continue working with NERC committees and task forces to bridge potential reliability gaps and risks.

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Reliability Standards Development Plan

2025-2027

December 10, 2024

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Introduction

Pursuant to Section 310 of the NERC Rules of Procedure, NERC is required to develop and provide to applicable governmental authorities an annual Reliability Standards Development Plan (RSDP) for Reliability Standards development.¹ Each annual RSDP must include a progress report, comparing results achieved, to the prior year's RSDP. NERC is required to consider the comments and priorities of the applicable governmental authorities in developing and updating the annual RSDP. NERC also provides the RSDP to the NERC Standards Committee (SC) for review and posts the RSDP for industry comment.

As described herein, this RSDP for 2025-2027 builds upon the goals of the previous RSDPs.

¹ NERC Rules of Procedure, Section 310, effective August 25, 2022, <https://www.nerc.com/AboutNERC/Pages/Rules-of-Procedure.aspx>

Background and Purpose

The 2025-2027 RSDP provides insight into Standards Development activities anticipated at the time of public posting for informal industry comment and is updated prior to the end of the calendar year so that stakeholders may adjust resources, as needed, to ensure the completion of Standards Development objectives. Other Standards Development processes such as Developing an Interpretation and Developing a Variance may be impactful to the RSDP and are included herein.² In order to help industry effectively allocate resources, the RSDP includes approximated time frames and anticipated resource expectations for each project under development.

This RSDP contemplates that the work of the Reliability and Security Technical Committee (RSTC) and working groups thereunder may result in new Standard Authorization Requests (SARs) and subsequent standards projects.³ It is also important to note that projects may be generated through the use of the Electric Reliability Organization risk framework, FERC orders, as well as the SARs generated from any stakeholder.

Periodic Reviews and initiatives also enable NERC to identify requirements that do not sufficiently improve reliability and should, therefore, be retired. Periodic Reviews will be initiated as needed and to ensure minimum requirements and expectations for periodic reviews are met.

While most of the work in the next three years will focus on new SARs and multiple projects to address inverter – based resources, there may be new or emerging risks identified that could generate new Standards Development projects. NERC will continue to seek input and recommendations from the Reliability Issues Steering Committee (RISC) with regard to emerging or potential risks to Bulk Power System (BPS) reliability that may require revisions to existing standards or new Standards Development.⁴

To help determine the impact of potential risk to BPS reliability, NERC will use a variety of feedback mechanisms, including, but not limited to, the ERO Enterprise Compliance Monitoring and Enforcement Program (CMEP), RISC reports, Events Analysis (EA), as well as any published EA Lessons Learned. The Regional Entities also have feedback mechanisms in place to solicit comments from industry. All feedback help is leveraged to inform approaches to address industry concerns as well as specific NERC Reliability Standards. Input into Standards Development will also continue to be coordinated with the North American Energy Standards Board as appropriate. In assessing feedback with standards as well as the Standards Development process, NERC focuses on available resiliency, reliability, and security information. Data from the CMEP is leveraged to determine whether a standard revision is needed to effectively address an identified risk.

² A full list of standard development processes are detailed in the Standards Processes Manual, NERC Rules of Procedure – Appendix 3A, https://www.nerc.com/AboutNERC/RulesOfProcedure/Appendix_3A_SPM_Clean_Mar2019.pdf

³ Reliability and Security Technical Committee, <https://www.nerc.com/comm/RSTC/Pages/default.aspx>

⁴ Reliability Issues Steering Committee, <https://www.nerc.com/comm/RISC/Pages/default.aspx>

Progress Report

Pursuant to Section 310 of the NERC Rules of Procedure, NERC offers the following progress report on Reliability Standards Development.

Prior Projects Anticipated to be Completed in 2023/2024

NERC Standards Development continues to move forward technically diverse drafts for both new and modified Reliability Standards. All of the five projects listed within the previous RSDP that were anticipated to be completed in late 2023 or in 2024, have been completed by August 2024. Projects completed in 2024 are listed under “Completed Projects” later in this report but also include Project 2020-04 Modifications to CIP-012 which was board adopted in December 2023.

Implementation of Prioritization

Since the prior RSDP, Standards Development has fully implemented the new prioritization process (see later chapter). This process was identified in prior progress reports and industry feedback as an essential tool to balance the number of active projects, projects with firm deadlines to complete, residual risk for slowing some projects down, and availability of resources (both NERC staff and industry). This effort has been consistently implemented, since designed, and Staff will continue to promote this tool as one means of managing a high quantity of active projects. Currently, more than 50% of active projects are designated as high priority. This is primarily due to the number of active projects associated with FERC Order directives or are part of NERC’s work plan priorities for 2024.

Active Project Ballot Fail Rate Indicator

Standards Development has been tracking ballot pass/fail results as an indicator for general project progress. Data was reviewed from 2017 through the date of this draft, November 18, 2024. Completed project data reviewed shows that previously completed projects took, on average, two ballots to pass. Projects that are in active development are demonstrating a trending upwards to a minimum of three ballots to pass. The figure below shows the fail rate trend for 2024 thus far which is calculated once a quarter.

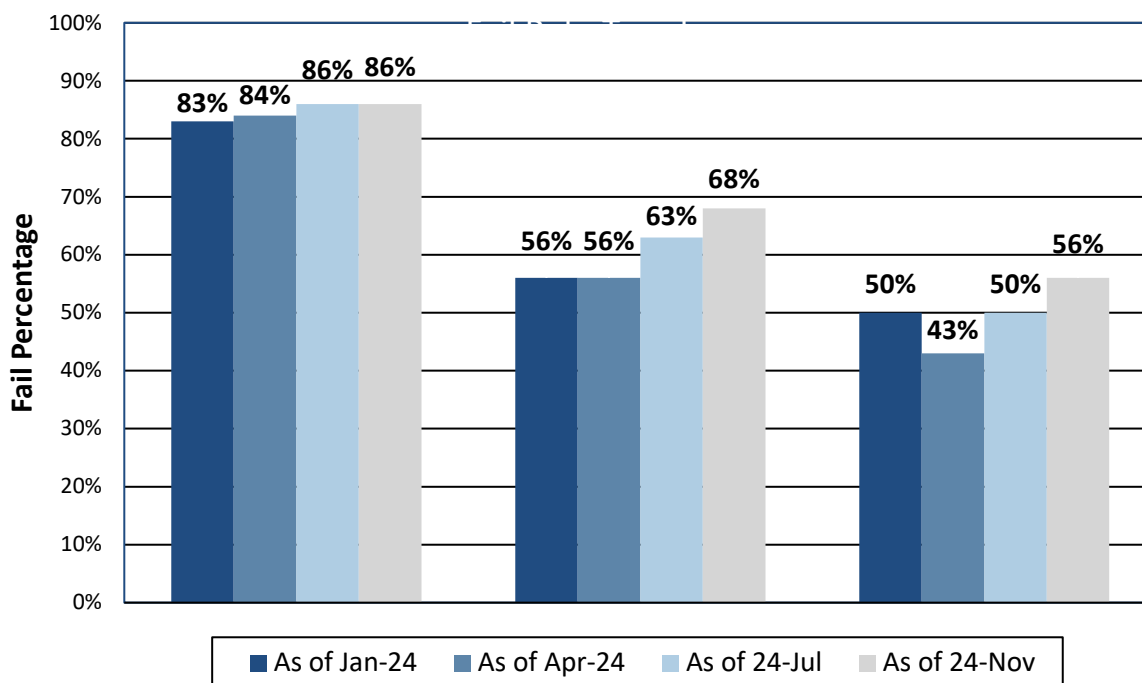


Figure 1: 2024 Active Project Ballot Fail Rate Trend

Standards staff believes this increasing trend is due to a variety of factors, such as the increased volume of high priority projects that each contribute to an increase in the number of ballots being posted for industry vote and formal comment periods. From January to April 2024, four ballots were put out to industry, and from April to July 2024, 11 ballots were posted, from July to November 2024, 17 ballots were posted. Industry continues to provide valuable feedback regarding communication from NERC staff as well as signaling ongoing resource constraints within industry. Staff are focused on addressing this trend. Over the next year, Staff will continue to identify opportunities to slow down medium priority and low priority projects, provide a consistent 3-month outlook of anticipated project postings, and greatly increase targeted outreach before the initial ballot and between additional ballots. There are other influencing factors, beyond the roles and responsibilities of drafting teams, that may continue to impact drafts failing to pass ballot. As such, Staff will simultaneously pursue implementing additional ways to collect and focus feedback on certain aspects of the development process or communication on projects overall. This qualitative data will be leveraged when comparing the Active Project Ballot Fail Rate Trend in future RSDPs.

FERC Directives

As of November 18, 2024, there are 82 outstanding Federal Energy Regulatory Commission (FERC) directives being resolved through the Standards Development process. Status of Standards Development progress in addressing FERC directives is reported quarterly to the NERC Board of Trustees (Board). The following projects are modifying Reliability Standards to address directives from FERC Orders:

FERC Order 901 – Milestone 3

- Project 2020-06 [Verifications of Models and Data for Generators](#) (14 directives)⁵;
- Project 2022-02 [Uniform Modeling Framework for IBR](#) (24 directives)⁶;
- Project 2021-01 [Modifications to MOD-025 and PRC-019](#) (3 directives)⁷;

FERC Order 901 – Milestone 4

- *Pending Operational Studies SAR* (Anticipated Q1 2025) (4 directives)⁸; and
- *Pending Transmission Studies SAR* (Anticipated Q1 2025) (7 directives)⁹.

FERC Order – Others

- Project 2023-07 Modifications to TPL-001-5.1 Transmission System Planning Performance Requirements for Extreme Weather ([Phase 1 - Order No. 896, 25 directives](#))¹⁰;
- Project [2024-03 Modifications to EOP-012-2](#), (June 27, 2024 Order, 5 directives)¹¹;
- Critical Infrastructure Protection Reliability Standard CIP-015-1 – Cyber Security – Internal Network Security Monitoring (Anticipated standards development project based on FERC Notice of Proposed Rulemaking Docket No. RM24-4-000 from September 19, 2024, FERC open meeting)¹²;

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

¹⁰ FERC June 15, 2023 Order No. 896 – Final Rule Transmission System Planning Performance Requirements for Extreme Weather; [Docket RM22-10-000](#)

¹¹ FERC June 27, 2024 Order Approving Extreme Cold Weather Reliability Standard EOP-012-2 and Directing Modification; [Docket No. RD24-5-000; RD24-1-000](#)

¹² FERC September 19, 2024 Open Meeting; Notice of Proposed Rulemaking; Critical Infrastructure Protection Reliability Standard CIP-015-1 – Cyber Security – Internal Network Security Monitoring; [Docket RM24-7-000](#)

- Supply Chain Risk Management Reliability Standards Revisions (Anticipated standards development project based on FERC Notice of Proposed Rulemaking Docket No. RM24-4-000 from September 19, 2024, FERC open meeting)¹³.

Continuing Projects

The following projects (new and existing), will continue into 2025:

1. Project 2017-01 [Modifications to BAL-003-1.1](#) (Phase 2)
2. Project 2019-04 [Modifications to PRC-005-6](#)
3. Project 2020-06 [Verifications of Models and Data for Generators](#) (FERC Order 901 Milestone 3 Project)
4. Project 2021-01 [System Model Validation with IBRs](#) (FERC Order 901 Milestone 3 Project)
5. Project 2021-02 [Modifications to VAR-002](#)
6. Project 2021-03 [CIP-002 Transmission Owner Control Centers \(Phase 2\)](#)
7. Project 2021-08 [Modifications to FAC-008](#)
8. Project 2022-02 [Uniform Modeling Framework for IBR](#) (FERC Order 901 Milestone 3 Project)
9. Project 2022-04 [EMT Modeling](#)
10. Project 2022-05 [Modifications to CIP-008 Reporting Threshold](#)
11. Project 2023-01 [EOP-004 IBR Event Reporting](#)
12. Project 2023-05 [Modifications to FAC-001 and FAC-002](#)
13. Project 2023-06 [CIP-014 Risk Assessment Refinement](#) (*anticipated* Board adoption May 2024)
14. Project 2023-07 [Modifications to TPL-001-5.1 Transmission System Planning Performance Requirements for Extreme Weather](#) (Phase 2)
15. Project 2023-08 [Modifications of MOD-031 Demand and Energy Data](#)
16. Project 2023-09 [Risk Management for Third-party Cloud Services](#)
17. Project 2024-01 [Rules of Procedure Definitions Alignment \(Generator Owner and Generator Operator\)](#)
18. Project 2024-02 [Planning Energy Assurance](#)
19. Project 2024-03 [Revisions to EOP-012-2](#)

Additional project information is available on the NERC website on the Standards web page.¹⁴

Completed Projects

The following projects have been completed in 2024 (actual Board adoption dates are noted):

1. Project 2016-02 [Modifications to CIP Standards](#) (adopted by the Board May 2024)
2. Project 2021-07 [Extreme Cold Weather Grid Operations, Preparedness, and Coordination \(Phase 2\)](#) (EOP-012-2 adoption by the Board February 2024)
3. Project 2022-01 [Reporting ACE Definition and Associated Terms](#) (adopted by the Board February 2024)

¹³ FERC September 19, 2024 Open Meeting; Notice of Proposed Rulemaking; Supply Chain Risk Management Reliability Standards Revisions; [Docket RM24-4-000](#)

¹⁴ As of the date of publication, the subject web page resides at <http://www.nerc.com/pa/Stand/Pages/default.aspx>.

4. Project 2023-03 [Internal Network Security Monitoring \(INSM\)](#) (adopted by the Board May 2024)
5. Project 2020-02 [Modifications to PRC-024 \(Generator Ride-through\)](#) (adopted by the Board October 2024)
6. Project 2020-06 [Verifications of Models and Data for Generators \(IBR Definition\)](#) (adopted by the Board October 2024)
7. Project 2021-04 [Modifications to PRC-002-2](#) (Phase 2, adopted by the Board October 2024)¹⁵
8. Project 2023-02 [Analysis and Mitigation of BES Inverter-Based Performance Issues](#) (adopted by the Board October 2024)

Anticipated to be Completed Projects

The following projects plan to be, completed in 2024 (anticipated Board adoption dates are noted):

1. Project 2021-03 [CIP-002 Transmission Owner Control Centers](#) (Transmission Owner Control Centers (TOCCs) SAR *anticipated* Board adoption December 2024)
2. Project 2022-03 [Energy Assurance with Energy-Constrained Resources](#) (Operations SAR *anticipated* Board adoption December 2024)
3. Project 2023-04 [Modifications to CIP-003](#) (*anticipated* Board adoption December 2024)
4. Project 2023-07 [Modifications to TPL-001-5.1 Transmission System Planning Performance Requirements for Extreme Weather](#) (Phase 1, *anticipated* Board adoption December 2024)

¹⁵ Phase 1 of this project completed in 2023, with Board adoption of Reliability Standard PRC-002-4 in February 2023. Phase 2 of this project revised PRC-002-5 and drafted new PRC-028-1 Reliability Standard.

Project Prioritization

NERC Standards Projects have been increasing in quantity; coinciding with an increasing pace of technological changes in our industry. Additionally, many of these projects are identified as higher priority with strict timelines as they may be associated with FERC Order directives or NERC corporate goals. NERC and industry have been driving prioritization efforts to assure available resources are focused on the most critical issues. This prioritization effort, within the Standards Development process, identifies those Reliability Standards Projects that must be allocated resources (time, drafting team members) as well how NERC may acceptably lower the resource demands on projects that have not been designated as “high priority”.

Purpose of Prioritization

The purpose of the prioritization process is to formalize a consistent approach. While the Standards prioritization effort is in the early stages of implementation, NERC Standards Development has designed and implemented a process to assure prioritization continues beyond the initial effort and becomes embedded as common practice. Conceptually, this prioritization effort includes internal resource management to meet ambitious goals in a dynamic environment. The process applies an initial strategy and approach but is intended to be revised as needed to reflect lessons learned and as this process matures.

In 2024 NERC staff has prioritized projects based on new directives. Due to the high volume of work from high priority projects in 2024, the medium and low priority projects that were originally anticipated to be completed in 2024 will be continuing into 2025. Medium priority projects were not allowed to post for formal or informal comment through Q2 2024. In Q3 of 2024, these projects were allowed to post for informal comment to receive industry feedback in anticipation of a formal comment period being available in Q4 of 2024 or Q1 of 2025. It is anticipated that once these projects are allowed to resume normal posting, they would be completed in 12-18 months. Low priority projects were not allowed to post for formal or informal comment through Q3 of 2024. This hold on postings for low priority projects is likely to continue into 2025, depending on the workload from multiple high priority projects with FERC directives and NERC Board Work Plan Priorities. Due to this rationale, no anticipated completion times have been included in the low priority projects listed below at this time.

Project Prioritization

In determining high, medium, or low priority designations for projects as listed in this RSDP, the following factors were taken into consideration:

1. Outstanding regulatory and NERC Board of Trustees directives with filing deadlines (High Priority)
2. RISC category rankings of high impact and NERC annual work plan priorities with consideration of probability of occurrence (High or Medium Priority)
3. Potential reliability risks from stakeholders and technical committees provided through feedback mechanisms (High, Medium, or Low Priority, based on the risk)
4. Outstanding regulatory directives without regulatory deadlines or “soft directives” such as considerations (High or Medium Priority)
5. Outstanding requirements that are known candidates for retirement (Medium or Low Priority)
6. Any known adverse content and quality assessments (likely Low Priority, as any reliability gaps identified have already been addressed)

NERC staff takes these factors into account and prioritizes projects at a minimum of twice a year. The most current prioritization slide deck can be found on the NERC website under [Reliability Standards Under Development](#). The prioritization categories below include estimates of needed work hours each drafting team member will be required to give to the project. These estimates include time spent for drafting team meetings (in-person and conference calls)

for the SAR phase and development phases as needed, time to conduct industry webinars and work hours outside of meetings to complete assigned tasks or outreach. Additionally, NERC recognizes the time required by each ballot member to respond to the comment form which is estimated to be 10 hours per entity per ballot iteration.

High Priority

NERC staff anticipates high priority projects will take a total of 985 work hours for 78 drafting team members, for a total of 11,425 hours, to complete by end of 2025.

- Project 2020-06 [Verifications of Models and Data for Generators](#) (FERC Order 901 Milestone 3 Project) (drafting estimated to be completed by October 2025 requiring approximately 11 subject matter experts for approximately 150 work hours each for this project).
- Project 2021-01 [System Model Validation with IBRs](#) (FERC Order 901 Milestone 3 Project) (drafting estimated to be completed by October 2025 requiring approximately 11 subject matter experts for approximately 140 work hours each for this project).
- Project 2022-02 [Uniform Modeling Framework for IBR](#) (Phase 2 - FERC Order 901 Milestone 3 Project) (project to be completed in phases with the initial SAR to be put on hold to address FERC Order Milestone 3 drafting estimated to be completed by October 2025 (Phase 2) requiring approximately 10 subject matter experts for approximately 150 work hours each for this project and Phase 1 drafting estimated to be completed by December 2025).
- Project 2023-06 [CIP-014 Risk Assessment Refinement](#) (drafting estimated to be completed by May 2025 requiring approximately 10 subject matter experts for approximately 100 work hours each for this project)
- Project 2024-01 [Rules of Procedure Definitions Alignment \(Generator Owner and Generator Operator\)](#) (Phase 1) (drafting estimated to be completed by February 2025 requiring approximately 10 subject matter experts for approximately 60 work hours each for this project)
- Project 2024-02 [Planning Energy Assurance](#) (drafting estimated to be completed by March 2026 requiring approximately 13 subject matter experts for approximately 270 work hours each for this project).
- Project 2024-03 [Revisions to EOP-012-2](#) (EOP-012-2 Approval Order) (drafting estimated to be completed by March 2025 requiring approximately 13 subject matter experts for approximately 125 work hours each for this project)

Medium Priority

NERC staff anticipates medium priority projects will take 1,025 work hours for 61 drafting team members for a total of 13,080 hours, to complete by end of 2026.

- Project 2021-03 [CIP-002 Transmission Owner Control Centers](#) (Phase 2) (drafting estimated to be completed by December 2025 requiring approximately 10 subject matter experts for approximately 130 work hours each for this project). This project will also have a phase 3 that is anticipated to be completed in 2026. Additional subject matter experts will be solicited to address these phases as needed.
- Project 2022-04 [EMT Modeling](#) (drafting estimated to be completed by March 2026 requiring approximately 12 subject matter experts for approximately 35 work hours each for this project).
- Project 2023-01 [EOP-004 IBR Event Reporting](#) (drafting estimated to be completed by December 2025 requiring approximately 12 subject matter experts for approximately 220 work hours each for this project).
- Project 2023-07 [Modifications to TPL-001-5.1 Transmission System Planning Performance Requirements for Extreme Weather](#) (Phase 2) (drafting estimated to be completed by May 2025 requiring approximately 14 subject matter experts for approximately 400 work hours each for this project)

- Project 2023-09 [Risk Management for Third-party Cloud Services](#) (drafting estimated to be completed by December 2025 requiring approximately 13 subject matter experts for approximately 240 work hours each for this project).

Low Priority

NERC staff anticipates low priority projects will take 315 work hours for 68 drafting team industry subject matter experts, for a total of 3,040 hours, to complete.

- Project 2017-01 [Modifications to BAL-003-1.1](#) (phase 2) (drafting requiring approximately 9 subject matter experts for approximately 60 work hours each for this project).
- Project 2019-04 [Modifications to PRC-005-6](#) (drafting requiring approximately 9 subject matter experts for approximately 40 work hours each for this project).
- Project 2021-02 [Modifications to VAR-002](#) (drafting requiring approximately 13 subject matter experts for approximately 40 work hours each for this project).
- Project 2021-08 [Modifications to FAC-008](#) (drafting requiring approximately 9 subject matter experts for approximately 80 work hours each for this project).
- Project 2022-05 [Modifications to CIP-008 Reporting threshold](#) (drafting requiring approximately 8 subject matter experts for approximately 55 work hours each for this project).
- Project 2023-05 [Modifications to FAC-001 and FAC-002](#) (drafting requiring approximately 10 subject matter experts for approximately 60 work hours each for this project).
- Project 2023-08 [Modifications of MOD-031 Demand and Energy Data](#) (drafting requiring approximately 10 subject matter experts for approximately 40 work hours each for this project).

Standards Grading

At the joint Standards Committee (SC) and Compliance and Certification Committee (CCC) meeting on July 20, 2022, the committees discussed the efficacy of the annual Standards Grading process and potential opportunities for improvement. The two committees agreed there was a need for a joint task force to review the Standards Grading process including the need, the methodology, and the outputs. Volunteers from both committees were solicited, and a task force formed, which will conclude its work in 2024. A low priority project addressing the results on the task force will be initiated in 2025. Recommendations from that project will be considered by RISC leadership when developing the bi-annual risk report.

Revision History

The below table includes all pertinent dates for this annual Reliability Standards Development Plan.

Revision History		
Version	Comments	Approval Date
1.0	Standards Committee informed of intent to post 2024 RSDP draft	08/21/2024
1.0	Initial draft publicly posted for informal comment	08/22/2024
1.1	Draft details updated for end of year submittal to the NERC Board of Trustees	11/19/2024

ROP Section 1600 Cold Weather Generator Data Request

Action

Authorize NERC staff to issue the following data request:

[\[Cold Weather Generator Data Collection\]](#)

Background

Over the past twelve years, NERC and Federal Energy Regulatory Commission (FERC) staff have initiated inquiries into five events where cold weather has caused effects to Bulk Electric System (BES) generation, with four of those events resulting in the need for firm load shed.¹ Based on the recommendations resulting from these inquiries, the ERO Enterprise and FERC have initiated several types of activities, such as Reliability Standards development, NERC Alerts issuances, a review of generator performance during cold weather in February 2024, and entity assist visits, among others, to support industry in extreme cold weather preparedness.

To that end, FERC issued an order² on February 16, 2023 approving Reliability Standards EOP-012-1 and EOP-011-3, directing further revisions to EOP-012-1, and directing NERC to work with FERC staff to develop a plan to collect data on the winterization of generating units and to submit an annual informational filing on the analysis of the data. Specifically, the Commission directed NERC to develop a plan that included, at a minimum, data that will help the Commission understand what portion of a generator's fleet is capable of performing at the Extreme Cold Weather Temperature for the location, what portion is under a corrective action plan (and until when), and what portion will not be winterized due to declared constraints. In addition, the Commission directed the plan to include how NERC will assess actual performance of freeze protection measures during future extreme cold weather events. Finally, the Commission directed NERC to file an annual informational filing reporting on the data and analysis.

In response, NERC filed its work plan on February 16, 2024 detailing its data collection and analysis for cold weather data.³ The plan describes the iterative approach to data collection, including the use of a ROP Section 1600 data request, based on the information that will be in each annual information filing. The first informational filing will be submitted to FERC on October 1, 2025.

Summary

Pursuant to ROP Section 1600, NERC staff requests Board authorization to issue the data request to the reporting entities. The data request would provide NERC with information needed to

¹ FERC, NERC, and Regional Entity Staff Report, Inquiry into Bulk-Power System Operations During December 2022 Winter Storm Elliott, FERC-NERC and Regional Entity Staff Report (Oct. 2023), at pp. 12-14, available at <https://www.ferc.gov/media/winter-storm-elliott-report-inquiry-bulk-power-system-operations-duringdecember-2022>.

² *N. Am. Elec. Reliability Corp.*, 182 FERC ¶ 61,094 (2023) (Order Approving Extreme Cold Weather Reliability Standards EOP-011-3 and EOP-012-1 and Directing Modification of Reliability Standard EOP-012-1) [hereinafter February 16 Order], *reh'g. denied*, 183 FERC ¶ 62,034, *order addressing arguments raised on reh'g*, 183 FERC ¶ 61,222.

³ Compliance Filing of the North American Electric Reliability Corporation for Cold Weather Data Collection, Docket No. RD23-1-000 (Feb. 16, 2024), https://www.nerc.com/FilingsOrders/us/NERC%20Filings%20to%20FERC%20DL/Cold_Weather_Data_Collection_Plan_signed.pdf.

assess cold weather preparedness of generating units, as directed by the Commission, and enable NERC to complete its analysis and informational filings within the directed deadline. Once authorized, the data request will be issued initially in 2025 and annually thereafter, with a deadline for submitting requested data and information by May 15 of each year.

NERC posted the initial proposed data request for a 45-day comment period from June 14, 2024 through July 29, 2024. NERC provided advance notice of the posting to the FERC Office of Electric Reliability on May 10, 2024. Along with the proposed data request, NERC submits the comments received, NERC's evaluation of the comments and responses, and a redline demonstrating the recommended revisions from the initial proposed data request to the Board.

Additional Information

A link to additional material on the Cold Weather Generator Data Request is included here for reference:

[\[Cold Weather Generator Data Request - Redline to Posted Draft\]](#)

[\[Cold Weather Generator Data Request Response to Comments\]](#)

[\[Cold Weather Generator Data Request – Mock Data Set\]](#)

[\[Section 1600 Data Requests Web Page\]](#)

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Section 1600 Data Request

Cold Weather Generator Data Collection

Kiel Lyons, Senior Manager, Compliance Assurance
Board of Trustees Meeting
December 10, 2024

- Background
 - FERC directive to collect and analyze generator data and submit annual informational filing
 - Complements existing cold weather preparedness efforts
- Action
 - Authorize NERC to issue annual data request



Questions and Answers

ERO Enterprise Long-Term Strategy

Action

Approve

Background

The *ERO Enterprise Long-Term Strategy* (Strategy) is an overarching strategy outlining key focus areas to inform NERC and Regional Entity (collectively, the ERO Enterprise) business planning processes as they work to achieve their shared vision and mission. The Strategy is intended to be enduring and inform the ERO Enterprise throughout multiple business planning cycles. ERO Enterprise leadership revisits the Strategy periodically and ensures Board and industry input on any material revisions.

The ERO Enterprise updated the Strategy this year with input from over 100 leaders across the ERO Enterprise, NERC and Regional Entity Board members, and the Member Representatives Committee.

The Strategy has been endorsed by all Regional Entity Boards and is now being presented to the NERC Board for approval. For NERC, the updated Strategy will inform and guide its three-year plan and budget starting with 2026.

Attachment

ERO Enterprise Long-Term Strategy

ERO ENTERPRISE LONG-TERM STRATEGY

Approved by NERC Board of Trustees XXXX

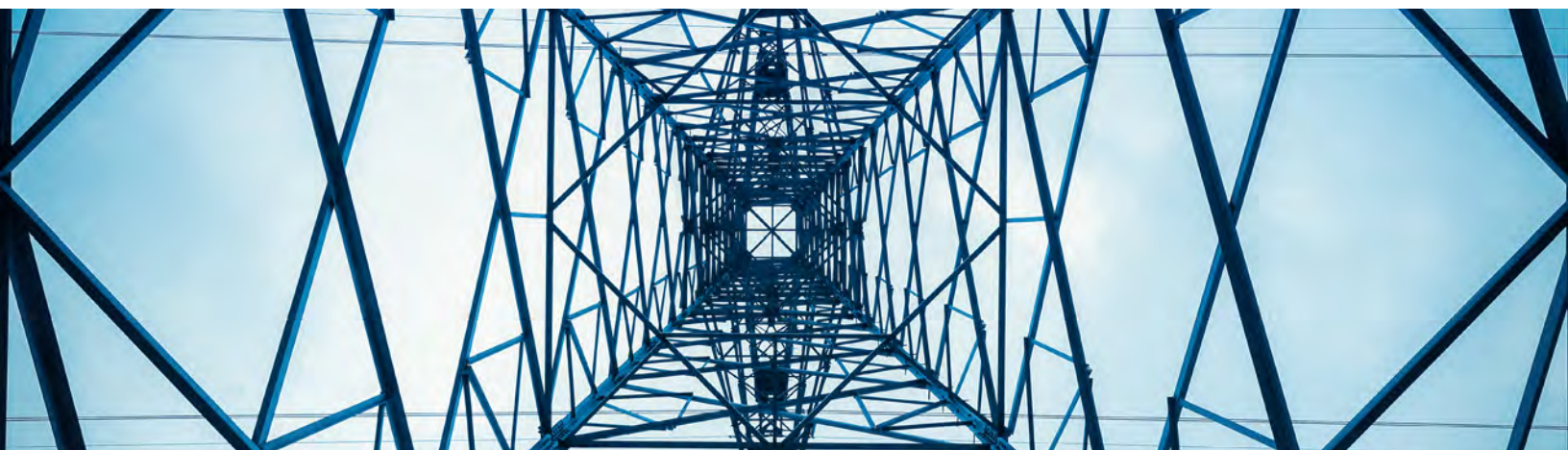
INTRODUCTION

Electricity is a vital component of the fabric of modern society and the Electric Reliability Organization (ERO) Enterprise serves to strengthen that fabric for the benefit of nearly 400 million North Americans. The ERO Enterprise, which consists of the North American Electric Reliability Corporation (NERC) and the six Regional Entities,¹ works with users, owners, and operators of the bulk power system (BPS), government partners, and other stakeholders and industry participants, to pursue its **mission of assuring the effective and efficient reduction of risks to the reliability and security of the BPS.**

NERC and the Regional Entities play different, but important and complementary, roles in delivering ERO Enterprise programs. NERC provides industry-wide perspective and oversight, and the Regional Entities have unique features and activities that serve the needs of their regional constituents, while ensuring that registered entities follow NERC and Regional Reliability Standards. **The ERO Enterprise is explicitly committed to its collective success in achieving its vision of a highly reliable and secure North American BPS.**

The electric industry is experiencing a rapid change in how systems are designed, planned, operated, and secured. The future reliability, resilience, and security ecosystem includes new risks, new complexities, new terminology, new technologies, new requirements, new players, and the blurring of risk across traditional jurisdictional boundaries. With these changes coming faster and more frequently than ever before, it is becoming increasingly challenging for policymakers to effectively balance reliability, resilience, and security, environmental sustainability, and access and affordability. As the industry landscape changes, the ERO Enterprise is in a unique position to support stakeholders and inform policymakers through this extraordinary time of transformation.

¹ The Regional Entities include the Midwest Reliability Organization (MRO), Northeast Power Coordinating Council (NPCC), ReliabilityFirst (RF), SERC Reliability Corporation (SERC), Texas Reliability Entity (Texas RE), and Western Electricity Coordinating Council (WECC).



With its collective mission and vision, the regional model is critical to the ERO Enterprise's success. The ERO Enterprise works to leverage its expertise and ensure it functions as a single synchronous machine maximizing the value of separate, but complementary, roles. The ERO Enterprise works to achieve this by engaging in a collaborative process through diverse activities, including ERO Enterprise-wide town halls, joint leadership training sessions, and work among chartered ERO Enterprise collaboration groups. The leadership of the ERO Enterprise has embraced the four foundational value drivers in the graphic to the right and the commitment to succeed by:



- Working together as one team and honoring each of its roles.
- Actively supporting ERO Enterprise activities, while eliminating unnecessary duplication of work.
- Collaborating in developing clear and consistent guidance across the ERO Enterprise.
- Sharing information, knowledge, and resources across the ERO Enterprise.
- Developing and sharing harmonized messages across ERO Enterprise communications.
- Supporting innovation, initiatives, and the sharing of best-practices across the ERO Enterprise.



ERO Enterprise Focus Areas

The ERO Enterprise has identified four focus areas for achieving success in its vision and mission:



ENERGY

Effectively leverage a broad range of data, tools, and approaches to assist stakeholders and policymakers in addressing existing BPS risks and proactively identifying and preparing for emerging and unknown risks to the grid.



SECURITY

Maintain cyber and physical security programs (E-ISAC, Standards, Compliance Monitoring and Enforcement Program (CMEP), technical committee work², outreach and engagement) that are risk-based, efficient, coordinated, and effectively advance the security posture of industry.



ENGAGEMENT

Ensure that the increasingly diverse spectrum of stakeholders and policymakers find value in engagements with the ERO Enterprise, seek ERO Enterprise expertise to inform their decision-making, and have confidence in the integrity and independence of ERO Enterprise programs.



AGILITY AND SUSTAINABILITY

Perform as an effective and efficient team acting in coordination, ensuring its programs and efforts deliver value for stakeholders and policymakers as they manage changing reliability and security risk within the evolving industry landscape, and capturing cost efficiencies when practical.

² Technical committees include the NERC Standing Committees (Compliance and Certification Committee, Personnel Certification and Governance Committee, Reliability Issues Steering Committee, Reliability and Security Technical Committee, and Standards Committee) and Regional Entity committees.



ENERGY

Effectively leverage a broad range of data, tools, and approaches to assist stakeholders and policymakers in addressing existing BPS risks and proactively identifying and preparing for emerging and unknown risks to the grid. The ERO Enterprise will support this focus area as follows:

- Actively engage and communicate with stakeholders and policymakers as they manage rapid change and evolving threats to create a sense of urgency to proactively implement risk mitigations.
- Develop the necessary process(es) and advanced analytical capabilities to improve the ERO Enterprise's ability to understand new and emerging technologies and identify new and emerging risks, including supporting and leveraging the broader ecosystem's ability to identify new and emerging risks.
- Maintain sufficient resource levels with requisite skillsets, and acquire and implement new organizational structures, processes, and systems needed to sustain regulatory obligations and address the challenges of the transforming grid.
- Create an environment where participants focus on reliability, resilience, and security performance as opposed to compliance risk.



SECURITY

Maintain cyber and physical security programs (E-ISAC, Standards, CMEP, technical committee work, outreach and engagement) that are risk-based, efficient, coordinated, and effectively advance the security posture of the industry. The ERO Enterprise will support this focus area as follows:

- Maintain a detailed understanding of the threat landscape and situational awareness and facilitate information sharing across the ERO Enterprise and with key stakeholders.
- Ensure registered entities and other key stakeholders clearly understand the security threat landscape, key risks, and mitigation techniques.
- Through the E-ISAC, monitor and distribute threat intelligence, conduct security briefings as required, and execute the requisite data analysis programs to guide and better inform the Regional Entities, registered entities, and other key external stakeholders.
- Develop a coordinated and integrated security program that reduces security risks and better aligns the related activities conducted by the E-ISAC, IT, Standards, CMEP, technical committee work, and Regional Entity outreach.
- Maintain position as a trusted advisor on security-related issues and improve ability to be sought out and inform future regulation.
- Build and maintain a mature security posture across all ERO Enterprise companies.



ENGAGEMENT

Ensure that the increasingly diverse spectrum of stakeholders and policymakers find value in their engagements with the ERO Enterprise, seek ERO Enterprise expertise to inform decision-making, and have confidence in the integrity and independence of ERO Enterprise programs. The ERO Enterprise will support this focus area as follows:

- Develop high quality relationships with stakeholders and policymakers and seek constructive and collaborative engagement on key reliability, resilience and security challenges facing the grid.
- Inform ERO Enterprise strategy and priorities by a deep and expert understanding of the wants and needs of the evolving and diverse stakeholder and policymaker ecosystem.
- Deliver technically rigorous and intellectually honest insights and analyses and communicate them in a timely, clear, concise, and compelling manner that inform stakeholders and policymakers.



AGILITY AND SUSTAINABILITY

Perform as an effective and efficient team acting in coordination, ensuring its programs and efforts deliver value for stakeholders and policymakers as they manage changing reliability and security risk within the evolving industry landscape, and capturing cost efficiencies when practical. The ERO Enterprise will support this focus area as follows:

- Ensure standards development processes and prioritization create alignment on risk mitigation across the ERO Enterprise and balance opportunities for stakeholder participation while being responsive to the changing risk environment.
- Harmonize the CMEP and Reliability Assessment and Performance Analysis (RAPA) program areas and leverage a common framework that focuses on risk-based efficiency, effectiveness, and agility across the ERO Enterprise.
- Harmonize planning, budgeting, and Information Technology systems to the extent practical recognizing the realities of the ERO Enterprise structure, focusing on efficiency, effectiveness, and agility across the ERO Enterprise.
- Leverage evolving technology to improve effectiveness and efficiency of processes and minimize reliability and security risk.
- Leverage the ERO Enterprise in attracting, engaging, and retaining a workforce with the appropriate technical and leadership skills needed to execute strategy and address the focus areas. Seek top talent, provide opportunities for growth, share expertise across the ERO Enterprise, and position the ERO Enterprise organizations as “employers of choice.”



CONCLUSION

As the reliability, resilience, and security ecosystem changes, the ERO Enterprise is in a unique position to support industry in ensuring North American BPS reliability, resilience, and security. These four focus areas – Energy, Security, Engagement, and Agility and Sustainability – will serve as a common input to NERC and Regional Entity business planning processes and are intended to guide the ERO Enterprise throughout multiple business planning and budgeting cycles. ERO Enterprise leadership will revisit these areas periodically to ensure the long-term strategy’s relevancy and efficacy, particularly in response to any changes to the ERO Enterprise landscape, as well as emerging reliability and security risks captured through the ERO Enterprise’s ongoing monitoring of reliability and the Reliability Issues Steering Committee’s processes and biennial report.

NERC 2025 Work Plan Priorities

Action

Approve

Background

NERC's 2025 Business Plan and Budget (BP&B) was approved by the Board of Trustees (Board) in August 2024 and subsequently approved by the Federal Energy Regulatory Commission in October 2024. The 2025 BP&B includes activities and supporting investments for Year Three of NERC's three-year plan for 2023–2025, which includes four strategic areas of focus:

- **Energy:** Tackle the challenge of grid transformation and climate change-driven, extreme weather
- **Security:** Move the needle by focusing on supply chain, Information Technology (IT) and Operational Technology (OT) system monitoring, cyber design, and evolution of the Critical Infrastructure Protection (CIP) Standards
- **Agility:** Tool the company to be more nimble in key areas, particularly standards development, internal operational processes
- **Sustainability:** Invest in ERO systematic controls, eliminate single points of failure, strengthen succession planning, and ensure robust cyber security protections for all systems

Summary

Enclosed for the Board's review and approval are the proposed 2025 Work Plan Priorities (WPPs), which are NERC's goalpost for executing Year Three of the 2023–2025 plan as supported by the 2025 BP&B. NERC and the Board identified the 2025 WPPs through a rigorous prioritization process, including input from the MRC BP&B Input Group. The result is 10 WPPs in 2025, which are reduced from 17 in 2024, highlighting NERC's continued focus on its most critical activities to further each of the four strategic areas of focus. Management will identify and track against specific deliverables to achieve each of these priorities and will report on its progress throughout 2025.

Attachments

Attachment 1 – Proposed 2025 Work Plan Priorities

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Presentation Title

Subtitle

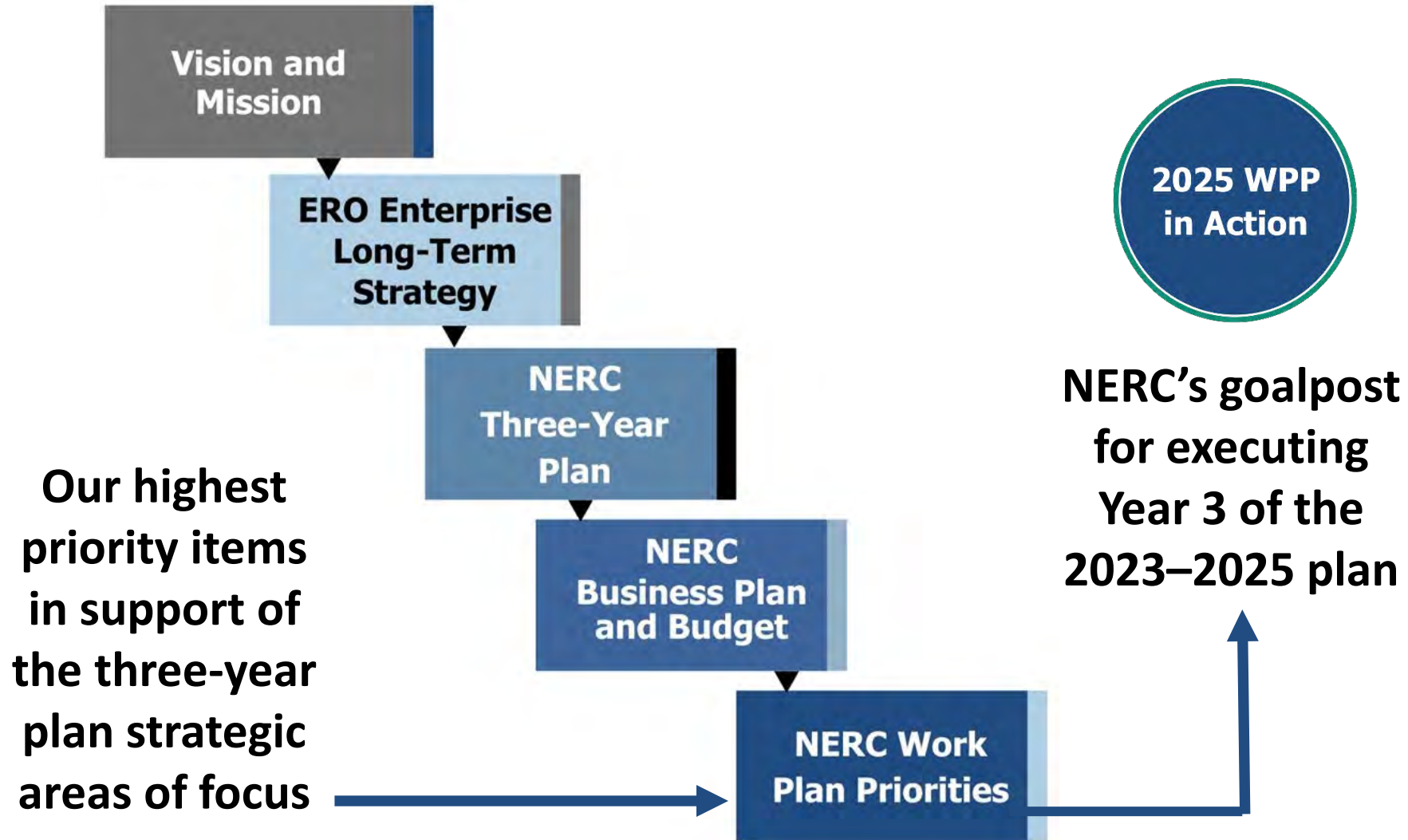
Presenter Name, Title

Meeting Name

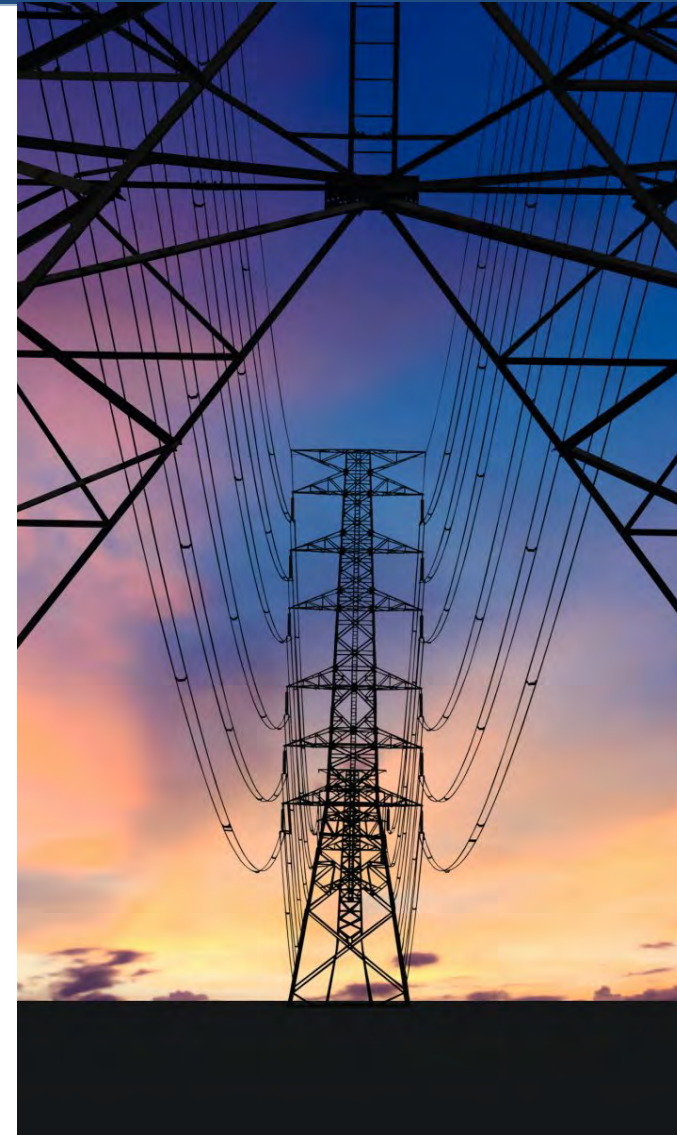
Month XX, 20XX

Proposed 2025 Work Plan Priorities

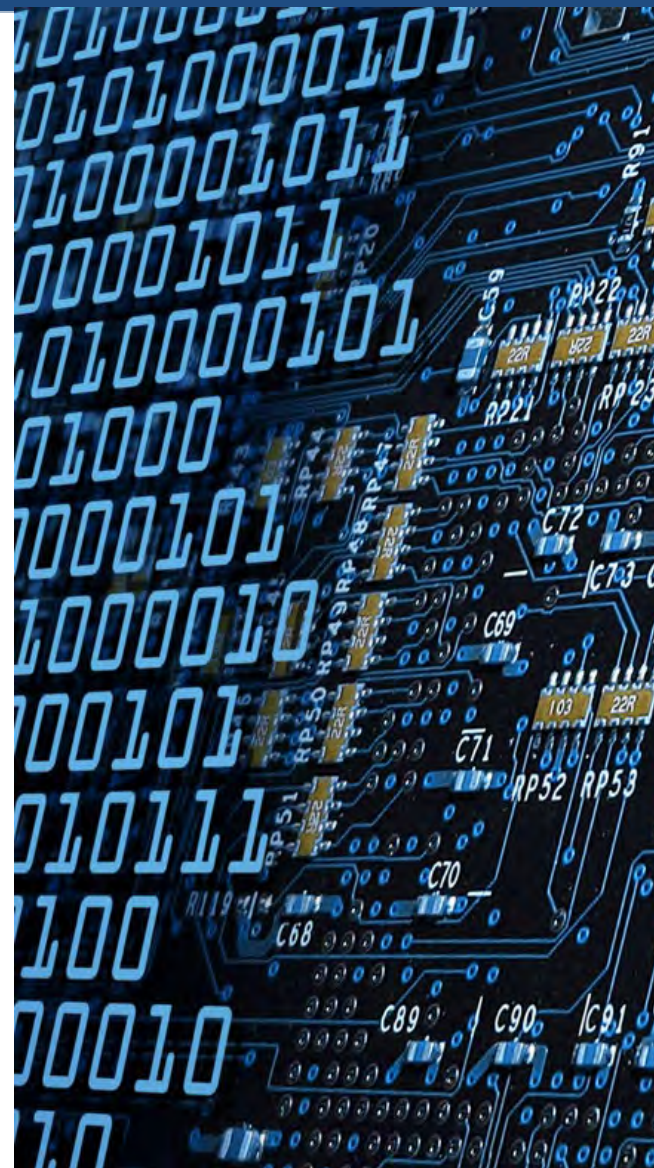
Board of Trustees Meeting
December 10, 2024



- 1. Develop a comprehensive framework to identify risks resulting from the transforming grid (e.g., inverter-based resources, large loads, essential reliability services) to enhance both the LTRA and State of Reliability Report.**
- 2. Meet all directives and regulatory mandates within required timeframes (e.g., cold weather, IBRs).**



- 3. Create a roadmap for ensuring CIP standards provide baseline protection for an evolving risk environment.**
- 4. Identify critical cyber and physical risks to industry (e.g., geopolitical, technological) and recommend actions to enhance grid security (e.g., automated sharing, CRISP, entity-capability building, SITES).**



5. Elevate stakeholder engagement to address a diverse stakeholder base through strategic outreach and communications and implementation of programs, services, and convening events.
6. Deliver innovative platforms to enhance the user experience and elevate outreach and engagement (e.g., NERC.com, E-ISAC Portal).
7. Evaluate the Reliability Standards development process and compliance implementation obstacles to reduce development time.



- 8. Enhance analytical capabilities to bolster reliability using artificial intelligence and other analytical tools in a deliberate and secure way.**
- 9. Leverage financial and HR systems to elevate employee experience, optimize workflows, and mitigate risks.**
- 10. Boost operational efficiency by revising corporate frameworks, consolidating facilities and maximizing our Connected Workforce capabilities.**





Questions and Answers