

**NERC**

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

# Reliability Standards Development Plan

2024-2026

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**RELIABILITY | RESILIENCE | SECURITY**



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# Table of Contents

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Background .....	iii
Executive Summary.....	iv
Progress Report.....	1
FERC Directives.....	1
Continuing Projects.....	1
Project Prioritization .....	3
High Priority.....	3
Medium Priority.....	4
Low Priority.....	4
Standards Development Projects Overview .....	6
Standards Grading.....	7

## Background

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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.<sup>1</sup> 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 2024-2026 builds upon the goals of the previous RSDPs.

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

## Executive Summary

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The 2024-2026 RSDP provides insight into standards development activities anticipated at the time of publication so that stakeholders may adjust resources as needed to assure completion of standards development objectives. Other standard development processes such as Developing an Interpretation and Developing a Variance may be impactful to the RSDP and are included herein.<sup>2</sup> In order to help industry understand resource requirements for each project, 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 more Standard Authorization Requests (SARs) and subsequent standards projects.<sup>3</sup> It is also important to note that projects may be generated through the use of the Electric Reliability Organization risk framework.

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 to assure minimum requirements and expectations for periodic reviews are met. Additionally, Periodic Reviews will be aligned with the strategic consideration of reviewing standard families that are interrelated.<sup>4</sup>

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 Electric System (BES) reliability that may require revisions to existing standards or new standards development.<sup>5</sup>

To help determine the impact of potential risk to BES reliability, NERC will use a variety of feedback mechanisms, including but not limited to, the Compliance Monitoring and Enforcement Program, RISC profiles, 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 and to help identify approaches to meet concerns and provide input to the standards. Input into standards will also continue to be coordinated with the North American Energy Standards Board as appropriate. In assessing feedback to create new or revised standards, NERC will focus on risk, reliability or security information, and enforcement data to determine whether a standard revision is needed to effectively address an identified risk.

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<sup>2</sup> 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](https://www.nerc.com/AboutNERC/RulesOfProcedure/Appendix_3A_SPM_Clean_Mar2019.pdf)

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

<sup>4</sup> The Periodic Review Standing Review Team grades the standards prior to conducting Periodic Reviews. The team includes representatives from NERC, the Regional Entities, and RSTC. If the standard is revised through the standard development process in response to a Periodic Review recommendation(s), the Periodic Review Standing Review Team will re-grade the standard with the revised language.

<sup>5</sup> Reliability Issues Steering Committee, <https://www.nerc.com/comm/RISC/Pages/default.aspx>

# Progress Report

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

## FERC Directives

As of June 30, 2023, there are five<sup>6</sup> outstanding directives being resolved through the standards development process. The status of the Standards directives are reported quarterly to the NERC Board of Trustees (Board).

## Continuing Projects

All of the other projects from the previous RSDP are complete, or are expected to be complete this year, except the following, which will continue into 2024:

1. Project 2017-01 [Modifications to BAL-003-1.1](#) (phase 2)
2. Project 2019-04 [Modifications to PRC-005-6](#)
3. Project 2021-01 [Modifications to MOD-025 and PRC-019](#)
4. Project 2021-02 [Modifications to VAR-002](#)
5. Project 2021-03 [CIP-002 Transmission Owner Control Centers](#)
6. Project 2021-07 [Extreme Cold Weather Grid Operations, Preparedness, and Coordination](#)
7. Project 2021-08 [Modifications to FAC-008](#)
8. Project 2022-04 [EMT Modeling](#)
9. Project 2022-05 [Modifications to CIP-008 Reporting threshold](#)
10. Project 2023-01 [EOP-004 IBR Event Reporting](#)
11. Project 2023-02 [Performance of IBRs](#)
12. Project 2023-03 [Internal Network Security Monitoring \(INSM\)](#)
13. Project 2023-04 [Modifications to CIP-003](#)
14. Project 2023-XX Modifications to CIP-014
15. Project 2023-XX Modifications to FAC-001 and FAC-002

Additional project information is available on the NERC website on the Standards web page.<sup>7</sup>

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<sup>6</sup> The following projects are currently modifying standards to address directives: 1) 2020-04 Modifications to CIP-012 (requirement for protections regarding the availability of communication links and data communicated between bulk electric system Control Centers) - Order No. 866 (Docket RM18-20-000) ; 2) The remaining requirements of the second directive require NERC to file quarterly status updates for 2016-02 Modifications to CIP Standards - Order Directing Informational Filings Regarding NERC Standards Drafting Projects (Docket RD20-2-000); 3)2023-03 Internal Network Security Monitoring (INSM)modify CIP Standards to implement INSM for all high impact BES Cyber Systems with and without external routable connectivity and medium impact BES Cyber Systems with external routable connectivity –Order No. 887; 4)2021-07 Revise EOP-012 with a revised Implementation Plan (Order No. 896); 5) IBR Ongoing Report to complete implementation of the workplan-Docket RD22-4-000).

<sup>7</sup> As of the date of publication, the subject web page resides at <http://www.nerc.com/pa/Stand/Pages/default.aspx>.

The following projects have been, or are planned to be, completed in 2023 (actual and anticipated Board adoption dates are noted):

1. Project 2016-02 [Modifications to CIP Standards](#) (anticipated Board adoption December 2023)
2. Project 2020-02 [Modifications to PRC-024 \(Generator Ride-through\)](#) (anticipated Board adoption December 2023)
3. Project 2020-04 [Modifications to CIP-012](#) (anticipated Board adoption December 2023)
4. Project 2020-06 [Verifications of Models and Data for Generators](#) (anticipated Board adoption December 2023)
5. Project 2021-03 [CIP-002 Transmission Owner Control Centers](#) (anticipated Board adoption December 2023)
6. Project 2021-04 [Modifications to PRC-002-2](#) (Phase 2, anticipated Board adoption December 2023)<sup>8</sup>
7. Project 2021-05 [Modifications to PRC-023](#) (adopted by the Board February 2023)
8. Project 2021-06 [Modifications to IRO-010 and TOP-003](#) (anticipated Board adoption August 2023)
9. Project 2021-07 [Extreme Cold Weather Grid Operations, Preparedness, and Coordination \(Phase 2\)](#) (anticipated adoption by the Board October 2023)
10. Project 2022-01 [Reporting ACE Definition and Associated Terms](#) (anticipated Board adoption December 2023)
11. Project 2022-02 [Modifications to TPL-001-5.1 and MOD-032-1](#) (anticipated Board adoption December 2023)
12. Project 2022-03 [Energy Assurance with Energy-Constrained Resources](#) (anticipated Board adoption December 2023)

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<sup>8</sup> The first phase of this project completed in 2023, with Board adoption of Reliability Standard PRC-002-4 in February 2023.

# Project Prioritization

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## 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)

## High Priority

- Project 2016-02 [Modifications to CIP Standards](#) (drafting estimated to be completed by December 2023 requiring 7 industry subject matter experts for approximately 100 work hours each for the remaining part of this project).
- Project 2020-02 [Modifications to PRC-024 \(Generator Ride-through\)](#) (drafting estimated to be completed by November 2023 requiring approximately 9 industry subject matter experts for approximately 120 work hours each for the remaining part of this project).
- Project 2020-04 [Modifications to CIP-012](#) (drafting estimated to be completed by November 2023 requiring approximately 10 subject matter experts for approximately 60 work hours each for this project).
- Project 2021-03 [CIP-002 Transmission Owner Control Centers](#) (drafting estimated to be completed by December 2023 requiring approximately 8 subject matter experts for approximately 40 work hours each for this project). Three additional SARs pertaining to CIP-002 are assigned to this project. Additional subject matter experts are being solicited to address these SARs.
- Project 2021-04 [Modifications to PRC-002-2](#) (Phase 2) (drafting estimated to be completed by December 2023 requiring approximately 10 subject matter experts for approximately 40 work hours each for this project)
- Project 2021-07 [Extreme Cold Weather Grid Operations, Preparedness, and Coordination](#) (drafting estimated to be completed in two phases over 2022-2024; first phase was completed in September 2022. Phase 2, standards EOP-011 and TOP-002, is expected to be completed by September 2023 requiring 15 subject matter experts for approximately 100 work hours each for the remaining of that part of the project. Phase 2, EOP-012, is expected to be completed by February 2024 requiring 15 subject matter experts for approximately 240 work hours each for the remaining of the project).
- Project 2022-03 [Energy Assurance with Energy-Constrained Resources](#) (drafting estimated to be completed by December 2023 requiring approximately 14 industry subject matter experts for approximately 120 work hours each for the remaining part of this project).
- Project 2023-01 [EOP-004 IBR Event Reporting](#) (drafting estimated to be completed by August 2024 requiring approximately 12 subject matter experts for approximately 60 work hours each for this project).

- Project 2023-02 [Performance of IBRs](#) (drafting estimated to be completed by December 2023 requiring approximately 14 subject matter experts for approximately 80 work hours each for this project).
- Project 2023-03 [Internal Network Security Monitoring \(INSM\)](#) (drafting estimated to be completed by March 2024 requiring approximately 10 subject matter experts for approximately 40 work hours each for this project).
- Project 2023-04 [Modifications to CIP-003](#) (drafting estimated to be completed by August 2024 requiring approximately 12 subject matter experts for approximately 60 work hours each for this project).
- Project 2023-XX Modifications to CIP-014 (drafting estimated to be completed by August 2023 requiring approximately 10 subject matter experts for approximately 40 work hours each for this project).
- **Placeholder for new Extreme Weather TPL project**

### Medium Priority

- Project 2020-06 [Verifications of Models and Data for Generators](#) (drafting estimated to be completed by December 2024 requiring approximately 12 subject matter experts for approximately 60 work hours each for this project).
- Project 2021-01 [Modifications to MOD-025 and PRC-019](#) (drafting estimated to be completed by May 2023 requiring approximately 11 subject matter experts for approximately 60 work hours each for this project)
- Project 2022-02 [Modifications to TPL-001-5.1 and MOD-032-1](#) (drafting estimated to be completed by August 2023 requiring approximately 10 subject matter experts for approximately 60 work hours each for this project).
- Project 2022-04 [EMT Modeling](#) (drafting estimated to be completed by December 2023 requiring approximately 10 subject matter experts for approximately 40 work hours each for this project).
- Project 2022-05 [Modifications to CIP-008 Reporting threshold](#) (drafting estimated to be completed by August 2024 requiring approximately 10 subject matter experts for approximately 80 work hours each for this project).
- Project 2023-XX Modifications to FAC-001 and FAC-002 (drafting estimated to be completed by August 2023 requiring approximately 10 subject matter experts for approximately 40 work hours each for this project).

### Low Priority

- Project 2017-01 [Modifications to BAL-003-1.1](#) (phase 2) (drafting estimated to be completed by February 2024 requiring approximately 10 subject matter experts for approximately 40 work hours each for this project).
- Project 2019-04 [Modifications to PRC-005-6](#) (drafting estimated to be completed by February 2024 requiring approximately 13 subject matter experts for approximately 40 work hours each for this project).
- Project 2021-02 [Modifications to VAR-002](#) (drafting estimated to be completed by November 2023 requiring approximately 13 subject matter experts for approximately 40 work hours each for this project).
- Project 2021-06 [Modifications to IRO-010 and TOP-003](#) (drafting estimated to be completed by July 2023 requiring approximately 10 subject matter experts for approximately 40 work hours each for this project).
- Project 2021-08 [Modifications to FAC-008](#) (drafting estimated to be completed by December 2023 requiring approximately 10 subject matter experts for approximately 60 work hours each for this project).



- Project 2022-01 [Reporting ACE Definition and Associated Terms](#) (drafting estimated to be completed by December 2023 requiring approximately 10 subject matter experts for approximately 40 work hours each for this project).

Over the past two years NERC Standards Development has seen a tremendous increase in the number of projects. This is due to the need to address grid transformation regarding inverter-based resources and Distributed Energy Resources, cyber security risks, and extreme weather. As a part of the prioritization NERC staff has reviewed the RISC Report, input from the Reliability and Security Technical Committee (RSTC), the Standing Committee Coordination Group, and 2023 NERC workplan priorities. As a result, personnel resources will focus on completing the following four projects first:

- Project 2020-02 Modifications to PRC-024 (Generator Ride-through),
- Project 2021-07 Extreme Cold Weather Grid Operations, Preparedness, and Coordination.
- Project 2022-03 Energy Assurance with Energy–Constrained Resources, and
- Project 2023-06 CIP-014

The remaining high priority projects will be worked on to be completed as noted above.

# Standards Development Projects Overview

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## Standards Development Projects Overview

The NERC RSTC subcommittees, working groups, and task forces conduct work plan activities as assigned. Known and emerging risks are reviewed and assessed and may result in a SAR being submitted to initiate a standards development project. Also, as industry works to operate a reliable and secure grid, a SAR may be submitted to address risks.

As a result of the growth in use of inverters as part of the bulk power system, the NERC Inverter-based Resource (IBR) Performance Task Force (IRPTF) undertook an effort to perform a comprehensive review of all NERC Reliability Standards to determine if there were any potential gaps or improvements. The IRPTF identified several issues as part of this effort and documented its findings and recommendations in the "[IRPTF Review of NERC Reliability Standards White Paper](#)," which was approved in March 2020 by the Operating Committee and the Planning Committee (now part of the RSTC). This assessment generated a number of projects listed in the RSDP.

The ERO's focus on cyber security is also at the forefront of addressing reliability risks. Standard development projects addressing internal network security monitoring, reporting threshold for Cyber Security Incidents, and Transmission Planning Assessments are a result of continued actions to keep the grid secure.

## Other Projects Commencing

Currently, no Reliability Standards meet the criteria for periodic review in 2024. SARs, emerging risks to the BPS, and FERC regulatory directives that may occur subsequent to publishing this RSDP may prompt additional projects through 2024.

## Standards Grading

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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. Recommendations will be provided once the task force has completed their review.