

**NERC**

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

# **DRAFT** Reliability Standards Development Plan

2018-2020

June 2017

**RELIABILITY | ACCOUNTABILITY**



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## Background

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The 2017–2019 Reliability Standards Development Plan (RSDP) continued progress toward NERC’s goal to develop a stable set of clear, concise, technically sound, and results-based NERC Reliability Standards and to retire requirements that do little to promote reliability. The 2017-2019 RSDP specifically highlighted the importance of the Integration of Variable Generation Task Force and Essential Reliability Services Working Group (ERSWG) recommendations and called for continued communication with the Reliability Issues Steering Committee (RISC) on emerging risks. The 2017-2019 RSDP also indicated that most of the work in the next three years would focus on Periodic Reviews and recognized there may be new or emerging risks identified that would generate new standards development projects. The addition of the Standards Grading Metric in 2016 informs the Periodic Reviews as to the quality and content of the standards.<sup>1</sup>

The 2017-2019 RSDP also recognized the importance of addressing subsequent directives from applicable regulatory authorities including the Federal Energy Regulatory Commission (FERC), Standard Authorization Requests (SARs), and the value of enhanced communication through industry feedback loops. It also stressed that Periodic Reviews and standards development activities would occur at a measured pace, compared to the level of activity and pace of standards development during previous years, and they will be aligned with strategic considerations of reviewing standard families that are interrelated.<sup>2</sup>

As described herein, the 2018-2020 RSDP builds upon the goals of the 2017-2019 RSDP, adding an additional objective of enhanced consideration of cost effectiveness in standards development.

Pursuant to section 310 of the NERC Rules of Procedure, NERC is required to develop and provide to applicable governmental authorities an annual RSDP for Reliability Standards development. 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.

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<sup>1</sup> The Periodic Review standing review team will grade the standards. The team includes representatives from NERC, the Regional Entities, and the NERC technical committees. Grading occurs prior to conducting the Periodic Review.

<sup>2</sup> In some cases, a narrower review of a standard will likely be appropriate. For example, there are not necessarily other interrelated standards with FAC-003.

## Executive Summary

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The 2018–2020 RSDP recognizes the diligent work of the last few years in transforming the body of NERC Reliability Standards into a mature state while shifting its focus to Periodic Reviews, FERC directives, emerging risks, SARs, and the standards grading initiative. The 2018-2020 RSDP also contemplates that the work of the various NERC technical committees and working groups thereunder, may result in one or more SARs and subsequent standards projects.

As with the 2017-2019 RSDP, Periodic Reviews will occur at a measured pace compared to the level of activity and pace of standards development during recent years. Additionally, Periodic Reviews will be aligned with strategic considerations of reviewing standard families that are interrelated. The Standards Grading Metric and “Final Grades for Standards Graded in 2017” (Attachment 1) help to inform the Periodic Reviews as to the quality and content of the standards.<sup>3</sup>

The 2018-2020 RSDP also includes plans for completing the Periodic Reviews initiated in 2016 and 2017, and for commencing additional Periodic Reviews in 2018.

While most of the work in the next three years will focus on Periodic Reviews, there may be new or emerging risks identified that would generate new standards development projects. NERC will continue to seek input and recommendations from the RISC with regard to emerging or potential risks to BES reliability that may require revisions to existing standards or new standards development. To help determine impact of potential risk to BES reliability, NERC will use various feedback mechanisms, including but not limited to, feedback from the Compliance Monitoring and Enforcement Program, RISC profiles, Events Analysis and Compliance violation statistics, as well as any published “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. Standards input will continue to be coordinated with the North American Energy Standards Board as appropriate.

NERC is committed to enhancing and refining cost effectiveness considerations in the standards development process during the 2018-2020 period. For example, during 2016 and 2017, NERC conducted two cost effectiveness pilots.<sup>4</sup> NERC continues to develop and implement its cost effectiveness process, which has been implemented more broadly in standards development and will continue to evolve during this work plan period. Cost effectiveness questions are also part of the Periodic Reviews and SAR process. NERC will continue to look for ways to enhance or refine the review and implementation of cost effectiveness during the standards development process in a way that is productive and does not unduly burden the industry for data and input.

This 2018-2020 RSDP provides insight into standards development activities anticipated at the time of publication, so that stakeholders may make available appropriate resources to accomplish these standards development objectives. Additional activities such as Requests for Interpretation and Regional Variance development may impact the plan. In order to help the industry understand resource requirements for each project, the RSDP now shows time frames and anticipated resources for each project under development.

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<sup>3</sup> The Periodic Review standing review team grades the standards prior to conducting Periodic Reviews. The team includes representatives from NERC, the Regions, and NERC technical committees. If there is a recommended change in the standard due to Periodic Review recommendations and subject to the standards development process, the Periodic Review standing review team will re-grade the standard with the revised language.

<sup>4</sup> Information on NERC’s cost effectiveness initiative can be found at: <http://www.nerc.com/pa/Stand/Pages/CostEffectivenessPilot.aspx>.

# 2017 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 in 2017.

## FERC Directives

As of June 14, 2017, there are 29 outstanding FERC directives. Additionally, FERC has issued directives pertaining to issues outside of NERC standards. These additional directives are being addressed by the NERC technical committees and other NERC departments (e.g., topics related to reliability assessment, performance analysis, etc.), which are not reflected in this total.

## Projects Completed in 2017

The 2017–2019 RSDP identified nine projects initiated in 2017 or continued from 2016. All of the projects listed therein have been completed in 2016 or are planned to be completed in 2017 except for Project 2013-03 Geomagnetic Disturbance Mitigation, Project 2015-09 Establish and Communicate System Operating Limits, Project 2015-10 Single Points of Failure, and Project 2016-02 Modifications to CIP Standards. Additional project information is available on the NERC website on the Standards page.<sup>5</sup>

**The following projects have been or are planned to be completed in 2017** (actual and anticipated NERC Board of Trustees (Board) adoption dates are noted):

### Projects from the 2017-2019 RSDP

1. Project 2015-08 Emergency Operations – EOP-004, EOP-005, EOP-006, EOP-008 (adopted by the Board in February 2017)
2. Project 2016-01 Modifications to TOP and IRO Standards – TOP-001, IRO-002 (adopted by the Board in February 2017)
3. Project 2016-03 Cyber Security Supply Chain Management – CIP-013-1 (Board adoption expected in August 2017)
4. Project 2016-EPR-01 Enhanced Periodic Review of Personnel Performance, Training, and Qualifications Standards - PER-001, PER-003, and PER-004
5. Project 2016-EPR-02 Enhanced Periodic Review of Voltage and Reactive Standards - VAR-001 and VAR-002

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<sup>5</sup> As of the date of publication, the subject web page resides at <http://www.nerc.com/pa/Stand/Pages/default.aspx>.

# 2018 Projects

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## Projects Continuing from 2017 into 2018

In determining high, medium, or low priority to designate projects as listed in this RSDP, the following factors were taken into consideration.

1. Outstanding regulatory directives with filing deadlines (High Priority)
2. RISC category rankings of high impact with consideration of probability of occurrence (High or Medium Priority)
3. Potential reliability risk from stakeholders provided through feedback mechanism (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 2013-03 Geomagnetic Disturbance Mitigation - TPL-007-2 (drafting estimated to be completed by April 1, 2018<sup>6</sup> requiring approximately 11 industry subject matter experts for approximately 120 work hours<sup>7</sup> each for the remaining part of this project)
  - FERC established a deadline of 18 months from the effective date of Order No. 830 for completing the revisions, which is May 2018
- Project 2016-02: Modifications to CIP Standards (drafting estimated to be completed by May 1, 2018 requiring approximately 10 industry subject matter experts or approximately 75 work hours each for the remaining part of this project)

### Medium Priority

- Project 2015-09 Establish and Communicate System Operating Limits- FAC-010, FAC-011, FAC-014 (drafting estimated to be completed by April 1, 2018 requiring approximately 10 industry subject matter experts or approximately 100 work hours each for the remaining part of this project)
- Project 2015-10 Single Points of Failure - TPL-001 (drafting estimated to be completed by April 1, 2018 requiring approximately 10 industry subject matter experts or approximately 60 work hours each for the remaining part of this project)
- 2016-04 Modifications to PRC-025-1 (drafting estimated to be completed by April 1, 2018 requiring approximately 6 industry subject matter experts for approximately 60 work hours each for the remaining part of this project)

### Low Priority

- Project 2016-EPR-01 Enhanced Periodic Review of Personnel Performance, Training, and Qualifications Standards - PER-001, PER-003, and PER-004 (drafting estimated to be completed by April 1, 2018)

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<sup>6</sup> The “estimated drafting completed by” date is NERC’s estimate of the final ballot date.

<sup>7</sup> The “work hours” estimates apply to 2018 only.

requiring approximately 10 industry subject matter experts for approximately 40 work hours each for the remaining part of this project)

- Project 2017-03 FAC-008 Periodic Review (drafting estimated to be completed by August 1, 2018 requiring approximately 10 industry subject matter experts for approximately 100 work hours each for the remaining part of this project)
- Project 2017-04 Periodic Review of Interchange Scheduling and Coordination Standards - INT-004, INT-006, INT-009 and INT-010 (drafting estimated to be completed by August 1, 2018 requiring approximately 10 industry subject matter experts for approximately 80 work hours each for the remaining part of this project)
- Project 2017-05 Periodic Review of NUC-001-3 (drafting estimated to be completed by May 1, 2018 requiring approximately eight industry subject matter experts for approximately 60 work hours each for the remaining part of this project)

## Projects Commencing in 2018

At least two Periodic Reviews should commence in 2018.

The following 31 standards will be eligible for periodic review in 2018:

BAL-005-02b	IRO-006-5	MOD-008-1	MOD-030-3	PRC-019-2
BAL-006-2	IRO-008-2	MOD-020-0	MOD-031-2	TOP-002-4
CIP-014-2	IRO-010-2	MOD-025-2	MOD-033-1	TOP-003-3
FAC-003-4	IRO-014-3	MOD-026-1	PER-001-1.1(ii)	
FAC-010-3	IRO-017-1	MOD-027-1	PRC-002-2	
FAC-013-2	MOD-001-1a	MOD-028-2	PRC-015-1	
IRO-001-4	MOD-004-1	MOD-029-2a	PRC-016-1	

Additionally, SARs, emerging risks to the Bulk Power System, and FERC regulatory directives that may occur subsequent to publishing this RSDP may prompt additional projects in 2018.

## Standards Grading Metrics

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The NERC SC endorsed a grading system for standards as a metric on March 9, 2016. The grading is conducted by the Periodic Review Standing Review Team (PRSRT) as set forth in the Periodic Review process. The PRSRT is comprised of the following:

- SRT chair: SC chair or (or SC chair delegate)
- Operating Committee (OC) chair (or OC chair delegate)
- Planning Committee (PC) chair (or PC chair delegate)
- NERC staff
- Representation from the Regional Entities

The grading metrics include possible scores of 0-3 for quality and 0-13 for content. The set of standards chosen each year for grading, according to the criteria in the above section, will be reviewed and their grading will be used to prioritize and determine the sequence they should enter into the Periodic Review process. At least one industry comment period will take place to allow industry to comment on the grading performed by the PRSRT. The grades, based on the PRSRT and any industry input will be finalized, appended to the RSDP, and used to complete the prioritization each year.



## Attachment 1

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### Final Grades for Standards Graded in 2017 (placeholder)

Standard and Requirement	Content Average	Quality Average
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