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Attachment A *Reliability Standards Development Plan: 2016-2018*

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**North American Electric Reliability
Corporation**

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)

**Docket Nos. RM05-17-000
RM05-25-000
RM06-16-000**

**NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION
INFORMATIONAL FILING OF RELIABILITY STANDARDS DEVELOPMENT PLAN
2016-2018**

The North American Electric Reliability Corporation (“NERC”) hereby submits its 2016-2018 Reliability Standards Development Plan (“2016 Development Plan”) in accordance with Section 310 of the NERC *Rules of Procedure*.¹ The 2016 Development Plan, included herein as **Attachment A**, provides a status update on active development projects, a forecast of future work to be undertaken by industry participants and NERC throughout the upcoming year, and an analysis comparing completed projects and development accomplishments with the prior year’s Reliability Standards Development Plan (“RSDP”). The NERC Board of Trustees (“NERC Board”) approved the 2016 Development Plan on November 5, 2015. NERC submits this filing and attached 2016 Development Plan for informational purposes only.

¹ Section 310 of NERC’s *Rules of Procedure* requires NERC to develop and provide an annual Reliability Standards Development Plan for development of Reliability Standards to the applicable governmental authorities. Under that Section, NERC is also required to consider comments and priorities of the applicable governmental authorities in any updates made to the plan, and the plan should compare current accomplishments with the prior plan. See NERC’s Rules of Procedure, accessible online at: <http://www.nerc.com/AboutNERC/Pages/Rules-of-Procedure.aspx>.

I. NOTICES AND COMMUNICATIONS

Notices and communications regarding this filing may be addressed to the following:

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II. BACKGROUND

Pursuant to Section 310 of the NERC Rules of Procedure, NERC submitted an initial version of a plan for Reliability Standards development, entitled the *Reliability Standards Development Plan: 2007–2009*, to the Federal Energy Regulatory Commission (“FERC” or “Commission”) in 2006. NERC has since updated the plan annually, and the 2016-2018 version of the plan is presented in this filing. Consistent with previous versions, the 2016 Development Plan is filed for informational purposes and no specific Commission action is requested at this time.

The 2016 Development Plan is intended to:

1. Serve as a management tool to guide and coordinate the development of Reliability Standards and provide benchmarks for assessing progress;
2. Serve as a communications tool for coordinating standards development work with applicable governmental agencies in the United States and Canada and for engaging stakeholders in Reliability Standards development activities; and
3. Provide a basis for developing annual plans and budgets for the NERC Reliability Standards Program.

As with each prior RSDP, NERC obtained industry input on the 2016 Development Plan, including input on potential future Reliability Standards development projects and the use of the

Enhanced Periodic Reviews (“EPRs”) template.² As detailed in Section III, NERC submits this filing to summarize the 2016 Development Plan and inform the Commission and other interested parties of revisions to project timelines and completion dates forecasted in the 2015 Development Plan that are reflected in the 2016 Development Plan, as well as any updates to timing of project development since NERC Board approval of the 2016 Development Plan.

III. 2016 DEVELOPMENT PLAN

A. Summary of 2016 Development Plan

Created based on input received from industry participants, the 2016 Development Plan continues the work initiated by the 2015 Development Plan necessary to bring the NERC Reliability Standards to “steady-state”³ and builds upon the foundation established by previous plans. Specifically, the 2016 Development Plan identifies the current plans and priorities for development and modification of NERC Reliability Standards in the immediate three-year time horizon.

Along with planned progress towards “stead-state,” the 2016 Development Plan includes projects to address emerging risks, new and remaining FERC directives, Paragraph 81⁴ criteria adjustments, and standards authorization requests (“SARs”). As described by the 2016

² The Enhanced Periodic Review (“EPRs”) Template fulfills the February 6, 2014 request from the NERC Board for NERC management and the leadership of the Standards Committee (“SC”) to develop a mutually-acceptable metric for 2015-2017, including a content and quality grading system for the Reliability Standards. The SC approved an EPR template on September 30, 2014. This was presented to the NERC Board on November 12, 2014 as part of the SC’s update. The template includes background information and questions to guide a comprehensive review of the standard(s) by the review team and it serves as documentation of the review team’s considerations and recommendations.

³ For the purposes of the 2016 RSDP, “steady-state” means a stable set of clear, concise, high-quality, and technically sound Reliability Standards that are results based.

⁴ “Paragraph 81” refers to Paragraph 81 of FERC’s March 15, 2012 Order issued on NERC’s Find, Fix and Track process. *N. Am. Elec. Reliability Corp.*, 138 FERC ¶ 61,193, at P 81, *order on reh’g and clarification*, 139 FERC ¶ 61,168 (2012) (“The Commission is interested in obtaining views on whether such requirements could be removed from the Reliability Standards with little effect on reliability and an increase in efficiency of the ERO compliance program. If NERC believes that specific Reliability Standards or specific requirements within certain Standards should be revised or removed, we invite NERC to make specific proposals to the Commission identifying the Standards or requirements and setting forth in detail the technical basis for its belief...”).

Development Plan, NERC anticipates that the majority of its work over the next three years will derive from EPRs. These EPRs will continue at a measured pace, as NERC plans to complete a number of reviews each year while aligning these reviews with several strategic considerations to review the quality and content of standards in an efficient, effective manner. The 2016 Development Plan provides an overview of each Reliability Standard or standard family that is a candidate for review through the EPR process as NERC continues its work towards steady state, and it highlights prioritization of all future projects with consideration of, among other things, communication with NERC’s Reliability Issues Steering Committee (“RISC”), potential Commission directives, and industry input.⁵

As reflected by various status updates since the 2016 Development Plan was approved by the NERC Board, described in more detail in the footnotes below, NERC anticipates that the Reliability Standards development work outlined in the 2016 Development Plan will be dynamic and will be updated periodically as projects are completed or as new needs are identified and projects are considered. NERC also recognizes Reliability Standards development in 2016 may require flexibility in planning to ensure that activities are given appropriate resources and priority.

B. Project Schedule and Timeline Updates

1. 2015 Progress Report

Below is an update on the status of projects identified in the 2015 Development Plan. The 2015 Development Plan identified sixteen (16) projects that would be initiated in 2015 or

⁵ In 2013, NERC retained five industry experts to independently review the NERC Reliability Standards, setting the foundation for a plan that will result in a set of clear, concise and sustainable body of Reliability Standards. Their report is available at: http://www.nerc.com/pa/Stand/Standards%20Development%20Plan%20Library/Standards_Independent_Experts_Review_Project_Report.pdf.

continue from 2014. Since creation of the 2015 Development Plan, some projects have been added, modified, or truncated based on resource availability, strategy, or efficiency.

According to the 2016 Development Plan, the following fourteen (14) projects were identified in the 2015 Development Plan and for completion in 2015 (any revisions to the originally forecasted schedule for these projects are footnoted below, as applicable):

- Project 2007-06 System Protection Coordination (PRC-027-1)⁶
- Project 2007-06.2 System Protection Coordination (PRC-001)⁷
- Project 2008-02.2 Phase 2 Undervoltage Load Shedding (UVLS) Misoperations (PRC-004 and PRC-010)
- Project 2010-14.1 Phase 1 Balancing Authority Reliability-based Controls: Reserves (BAL-002)⁸
- Project 2010-14.2.1 Phase 2 Balancing Authority Reliability-based Controls (BAL-005, BAL-006)⁹
- Project 2010-14.2.2 Phase 2 Balancing Authority Reliability based Controls (BAL-004)¹⁰
- Project 2014-02 Critical Infrastructure Protection (CIP-003-6, CIP-004-6, CIP-007-6, CIP-010-2, CIP-011-2)
- Project 2014-03 Transmission Operations (TOP-001-3)
- Project 2015-02 Periodic Review of EOP Standards (EOP-004, EOP-005, EOP-006, and EOP-008)
- Project 2014-01 Standards Applicability for Dispersed Generation Resources
- Project 2014-04 Physical Security Directives¹¹
- Project 2015-03 Periodic Review of System Operating Limit Standards (FAC-010, FAC-011, and FAC-014)
- Project 2015-04 Alignment of NERC Glossary of Terms used in NERC Reliability Standards and the Definitions Used in the Rules of Procedure

⁶ Based on stakeholder feedback and timing associated with the Commission-approved NERC standard development procedures, Project 2007-06 has been rescheduled for NERC Board approval in the first half of 2016.

⁷ Based on stakeholder feedback and timing associated with the Commission-approved NERC standard development procedures, Project 2007-06.2 has been rescheduled for NERC Board approval at a later date.

⁸ Development in Project 2010-14.1 was completed in November 2015, and the standard and associated documents are being prepared for submission to the Commission in early 2016.

⁹ Based on stakeholder feedback and timing associated with the Commission-approved NERC standard development procedures, Project 2010-14.2.1 has been rescheduled for NERC Board approval in the first half of 2016.

¹⁰ Based on stakeholder feedback and timing associated with the Commission-approved NERC standard development procedures, Project 2010-14.2.2 has been rescheduled for NERC Board approval in the first half of 2016.

¹¹ Project 2014-04 was reopened to address a directive from Commission Order No. 802, issued on November 20, 2014. Because the timing was relatively short between filing and approval of the original standard, the same standard drafting team was kept in place and the original SAR revised.

- Project 2015-06 Interconnection Reliability Operations and Coordination¹²

The following projects were initiated in 2015 in response to Commission directives and were completed during 2015:

- Project 2007-17.4 PRC-005 FERC Order No. 803 Directive¹³
- Project 2010-04.1 MOD-031 FERC Order No. 804 Directive¹⁴

In addition to these projects, the 2016 Development Plan anticipates that eight (8) projects will be continued from 2015 into 2016. Notwithstanding the most recent updates to project statuses provided in the footnotes above, development under the following projects will continue into 2016:

- Project 2009-02 Real-time Reliability Monitoring and Analysis Capabilities
- Project 2015-07 Internal Communications Capabilities FERC Order No. 808 Directive
- Project 2010-07.1 Vegetation Management (FAC-003)
- Project 2015-10 Single Points of Failure (TPL-001)
- Project 2010-05.3 Phase 3 of Protection Systems Remedial Action Schemes (RAS)
- Project 2014-02 Critical Infrastructure Protection
- Project 2015-06 Emergency Operations
- Project 2015-09 System Operating Limits

2. Prioritization of 2016 Projects

For each new Reliability Standard Project listed in the 2016 Development Plan, the SC has assigned a priority of either high, medium, low, or pending technical committee input. These rankings are in addition to priority assignments made in previous plans, and the assignments are based on, among other things, RISC Category Rankings, regulatory directives, regulatory

¹² Because Project 2015-06 was put on hold until Project 2014-03 (TOP/IRO Revisions) was filed with the applicable governmental authorities, development began during the second quarter of 2015 and will continue until completion.

¹³ Project 2007-17.4 was initiated in 2015 in response to a directive from Commission Order No. 803 (150 FERC ¶ 61,039), issued on January 22, 2015. Because the timing was relatively short between filing and approval of the original standard, the same standard drafting team was kept in place and the original SAR was revised.

¹⁴ Project 2010-04.1 was initiated in 2015 in response to a directive from Commission Order No. 804 (150 FERC ¶ 61,109), issued on February 19, 2015. Because the timing was relatively short between filing and approval of the original standard, the same standard drafting team was kept in place and the original SAR was revised.

deadlines, Reliability Standards that are candidates for retirement, and recommendations from the IEPR report. The following projects, which were not prioritized in previous plans, have been categorized as High priority:

- Project 2009-02 Real-time Reliability Monitoring and Analysis Capabilities¹⁵
- Project 2015-07 Internal Communications Capabilities FERC Order No. 808 Directive
- Project 2010-07.1 FAC-003 Vegetation Management
- Project 2015-10 Single Points of Failure TPL-001.

The following projects, including Project 2014-02 which was prioritized as Medium in the 2015 Development Plan, have been categorized as Medium priority on a going forward basis:

- Project 2010-05.3 Phase 3 of Protection Systems- remedial action schemes (RAS)¹⁶
- Project 2014-02 Critical Infrastructure Protection
- Project 2015-08 Emergency Operations
- Project 2015-09 System Operating Limits.

There are no currently active projects that have been identified as Low priority.

3. Projects to Be Initiated in 2016

As explained in the 2016 Development Plan, NERC does not anticipate development of any specific projects in 2016; rather, projects will be initiated based on either (i) EPR recommendations for existing standards, (ii) emerging risks identified by the Commission, the Reliability Issues Steering Committee, NERC, or industry participants, (iii) interpretations¹⁷, or (iv) modifications to existing standards as directed by the Commission in future Orders.

¹⁵ As noted on page 5 of the 2016 Development Plan (included as Attachment A hereto), this project is targeted for NERC Board of Trustee approval in February 2016.

¹⁶ As noted on page 6 of the 2016 Development Plan (included as Attachment A hereto), this project is targeted for NERC Board of Trustee approval in February 2016

¹⁷ Pursuant to Section 7 of the Standard Processes Manual, NERC will continue to accept Requests for Interpretations and submit these requests to the NERC SC so that the committee may decide whether “to accept the request for Interpretation and move forward in responding to the Interpretation request.” If the SC votes to accept the Interpretation, NERC Standards Staff will act according to Section 7 to initiate development of that interpretation.

The industry-led SC has prioritized current and upcoming projects, as communicated through prioritization schedules and project plans, to ensure that development moves at a measurable and sustainable pace. As indicated in the 2016 Development Plan, the following standards or standards families are candidates for review through the EPR process, which will take into account revisions necessitated by the Risk-Based Registration initiative and other considerations:

- BAL and INT families (BAL-001 and INT-004, INT-006, INT-009, and INT-010)
- EOP-001, EOP-002, and EOP-003¹⁸
- EOP-010
- FAC-008-3
- NUC-001-3
- PER-001, PER-003, and PER-004
- PRC families
- VAR-001 and VAR-002

The trend towards an iterative process to continuously monitor and improve existing standards and address recognized risks is indicative of NERC's progress towards "steady-state." The 2016 Development Plan emphasizes this goal and states that as this goal is achieved, Reliability Standards "will continue to be assessed for quality, content or alignment with other standards through EPRs."

¹⁸ Since NERC Board approval of the 2016 Development Plan, the Commission approved Reliability Standard EOP-011 and concurrently approved retirement of EOP-001, EOP-002, and EOP-003. As such, these standards will not be reviewed for revision through the EPR process.

IV. CONCLUSION

As discussed above, the 2016 Development Plan was developed in accordance with Section 310 of the NERC Rules of Procedure and identifies the current plans and priorities for development and modification of NERC Reliability Standards in the immediate three-year time horizon.

Respectfully submitted,

/s/ Andrew C. Wills

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Date: December 30, 2015

CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing document upon all parties listed on the official service list compiled by the Secretary in this proceeding. Dated at Washington, D.C. this 30th day of December, 2015.

/s/ Andrew C. Wills

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Associate Counsel for the North American
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ATTACHMENT A

RELIABILITY STANDARDS DEVELOPMENT PLAN

2016-2018

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Reliability Standards Development Plan

2016–2018

November 5, 2015

RELIABILITY | ACCOUNTABILITY



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Background

The 2015–2017 Reliability Standards Development Plan (RSDP) outlined a method for NERC Reliability Standards to reach “steady state,”¹ addressing the remaining FERC directives and recommendations to retire requirements. The number of active projects in the plan was less than in prior RSDPs, and it was projected that the number of projects would remain at the 2015 level in future years. The 2015–2017 RSDP indicated that, after Reliability Standards reach steady state in 2016, projects in future years would consist of standards being assessed for quality, content, or alignment with other standards through enhanced periodic reviews (EPRs), projects addressing FERC directives, or newly identified risks to the Bulk Power System (BPS). Following the completion of the work to achieve Steady-State, the Reliability Standards will continue to be assessed for quality, content or alignment with other standards through EPRs.

The Members Representative Committee (MRC) and the NERC Board of Trustees (Board) sought industry input prior to the May 2015 meetings regarding the future of standards development. In light of the approaching milestone of steady state standards maturity, the Board asked whether the NERC Reliability Standards should be considered stabilized or if there is value in making additional significant enhancements. If considered stabilized at steady state, only incremental refinements would be made to the standards to address FERC directives or newly identified risks to the BPS.

Pursuant to the NERC Rules of Procedure, Section 310, “NERC shall develop and provide an annual Reliability Standards Development Plan for development of Reliability Standards to the applicable governmental authorities. NERC shall consider the comments and priorities of the applicable governmental authorities in developing and updating the annual Reliability Standards Development Plan. Each annual Reliability Standards Development Plan shall include a progress report comparing results achieved to the prior year’s Reliability Standards Development Plan.” NERC also includes the Standards Committee review during development of the RSDP and posts the RSDP for industry comment.

¹ For the purposes of that plan, “steady state” means a stable set of clear, concise, high-quality, and technically sound Reliability Standards that are results based, including the retirement of requirements that do little to promote reliability.

Executive Summary

This 2016–2018 RSDP sets forth a plan that involves conducting the EPRs as well as accomplishing other envisioned tasks by addressing: 1) emerging risks, 2) FERC directives, and 3) standards authorization requests (SARs). This plan specifically includes the Integration of Variable Generation Task Force (IVGTF) recommendations, the Essential Reliability Services Task Force (ERSTF) recommendations, communication with the Reliability Issues Steering Committee (RISC) on other emerging risks, potential FERC directives, and input from industry on the feedback loops explained in detail later in this plan.

Based on the policy input and the discussion at the Board, it appeared there was general support to conduct the 2016–2018 EPRs at a measured pace.² It also appeared there was general support for a set goal of completing a certain number of reviews each year with the understanding that the reviews should be aligned with strategic considerations of reviewing standard families³ that are interrelated. There was also support for the EPRs to start with a period of study and data evaluation of three to six months to inform the reviews. Accompanying the measured approach to review the quality and content of standards through the EPR process, the Board requested that the Standards Committee and NERC staff develop a standards metric. Although the standards metric is not explicitly included in the 2016–2018 RSDP, it will be referenced after it is approved by the Board in the filing to the applicable governmental authorities by the end of the year.

It is important to note that while most of the work in the next three years will focus on EPRs, there may be new or emerging risks identified that would generate full standards development work. NERC and the Standards Committee will continue to seek input and recommendations from the RISC with regard to potential risks to reliability that may be addressed through the revision of existing standards or the development of new standards.

This plan is meant to provide a perspective of the standards development work to be undertaken at time of publication to appropriate the necessary resources to accomplish the standards development objectives.

² The Standards Committee approved an enhanced periodic review template on September 30, 2014. This was presented to the Board on November 12, 2014, as part of the Standard Committee's update. The template includes background information and questions to guide a comprehensive review of the standard(s) by the review team and it serves as documentation of the review team's considerations and recommendations.

³ In some cases, the one-off review of a standard will likely be appropriate. For example, there are not necessarily other interrelated standards with FAC-003.

Steady State

This section provides information on the status of FERC directives, Paragraph 81 candidates, and the Independent Experts Review Panel’s (IERP) recommendations for retirement. Completion of projects is discussed in the next section, 2015 Progress Report.

Directives

In 2013, NERC set out to address the 191 FERC directives that were issued or unaddressed prior to December 2012. All of the outstanding standards-related directives are being addressed in current 2015 projects. As of June 30, 2015, there were 35 standards-related directives, including FERC guidances, to be resolved. Table 1 illustrates the progress to address FERC directives issued and only includes directives that are standards related.

Table 1: Summary of Total Directives			
	Pre-2013 Directives*	Post-2012 Directives*	Total
Issued prior to year-end 2012	191		
Issued since year-end 2012		56	
Resolved as of March 31, 2015	168	44	
Remaining	23	12	35
Projected to be resolved in 2015	18	6	24
Projected remaining at year-end 2015	5	6	11
*Does not include directives for other NERC departments			

While this is one benchmark, it is also an imperative to address the FERC directives issued post-December 2012 in a timely fashion. As noted in the footnote to Table 1, FERC issued some directives that require work from groups outside of Standards, such as the NERC technical committees, or another internal NERC department, such as Reliability Assessment and Performance Analysis (RAPA). These directives, as they cannot be resolved through a Standards process, are not included in the above numbers. Depending upon project completion, 186 will be addressed at year-end 2015.

Trend in Number of Requirements

As the NERC Reliability Standards become steady state, there is an expectation that the total number of requirements subject to enforcement will be reduced. To measure the accuracy of NERC’s expectation, NERC staff used the *US Enforcement Status/Functional Applicability Spreadsheet*⁴ to analyze the trend in the total number of Board-approved requirements at the end of each year since standards became enforceable in the U.S. in 2007.

Figure 1 on the next page was created⁵ for the November 2014 SOTC meeting and was based on each requirement’s U.S. enforcement date in the *US Enforcement Status/Functional Applicability Spreadsheet*. For comparison, this figure has been updated with information contained in the spreadsheet as of June 30, 2015. This figure updates the projection for 1) pending continent-wide retirements and 2) the number of regional Reliability

⁴Available from the Standards section of the NERC website: <http://www.nerc.com/pa/Stand/Pages/default.aspx>.

⁵This figure was developed using Q2 2014 data.

Standards. The variances within continent-wide standards were removed from the regional Reliability Standards line.

Using the November 2014 data, the line indicating the number of retirements shows a downward slope in 2014–2015. This downward trend was anticipated as pending projects were filed. Using the June 2015 data, the line indicating the number of requirements shows the downward trend in 2016–2017 to more accurately reflect the anticipated enforcement dates. The projects pending that have significant reductions in the number of requirements include Project 2014-03 TOP/IRO Revisions with a net reduction of 57 requirements, Project 2012-05 Available Transmission System Capability (MOD A) with a net reduction of 50 requirements, and Project 2009-03 Emergency Operations with a net reduction of 17 requirements. Table 2 provides the list of projects pending approval. Overall, the total pending projects reflect a potential reduction of 108 requirements.

Figure 1 also includes the projected number of requirements at the end of each of the data lines. In November 2014, it was anticipated that the number of enforceable standards, once all projects were implemented, would be 422. At this time, the projection is 405 requirements.

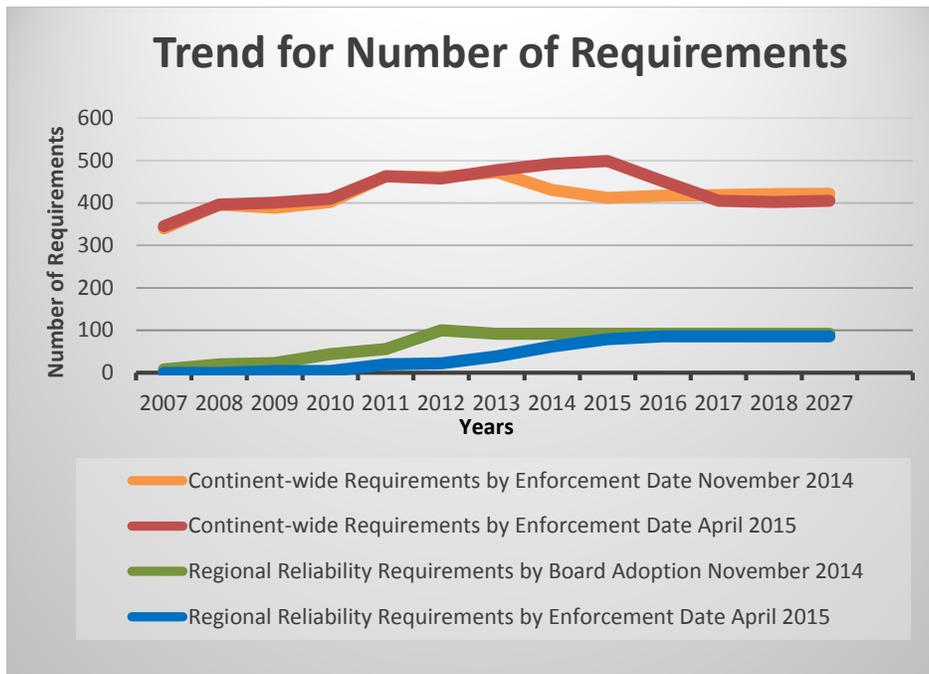


Figure 1: Trend for Number of Requirements

2015 Progress Report

The 2015–2017 RSDP identified 16 projects that initiate in 2015 or continue from 2014. All of the projects listed in this section are expected to have been completed in 2015 or are planned to be completed, except Project 2009-02: Real-time Reliability Monitoring and Analysis Capabilities, and Project 2010-05.3: Phase 3 of Protection Systems: Remedial Action Schemes (RAS), which are both listed under “Projects continuing from 2015 into 2016.”

At the time of presentation to the NERC Board of Trustees, the following projects were expected to be completed in 2015:

Projects from the 2015–2017 RSDP

1. Project 2007-06: System Protection Coordination (PRC-027-1)
2. Project 2007-06.2: System Protection Coordination (PRC-001)
3. Project 2008-02.2: Phase 2 – Undervoltage Load Shedding (UVLS): Misoperations (PRC-004 and PRC-010)
4. Project 2010-14.1: Phase 1 – Balancing Authority Reliability-based Controls: Reserves (BAL-002)
5. Project 2010-14.2.1: Phase 2 – Balancing Authority Reliability-based Controls (BAL-005, BAL-006)
6. Project 2010-14.2.2: Phase 2 – Balancing Authority Reliability-based Controls (BAL-004)
7. Project 2014-02: Critical Infrastructure Protection (CIP-003-6, CIP-004-6, CIP-007-6, CIP-010-2, CIP-011-2)
8. Project 2014-03: Transmission Operations (TOP-001-3)
9. Project 2015-02: Periodic Review of EOP Standards (EOP-004, EOP-005, EOP-006, and EOP-008)
10. Project 2014-01: Standards Applicability for Dispersed Generation Resources (medium-priority standards)
11. Project 2014-04: Physical Security Directives⁶
12. Project 2015-03: Periodic Review of System Operating Limit Standards (FAC-010, FAC-011, and FAC-014)
13. Project 2015-04: Alignment of NERC Glossary of Terms used in NERC Reliability Standards and the Definitions Used in the Rules of Procedure
14. Project 2015-06: Interconnection Reliability Operations and Coordination⁷

Additional Projects conducted to address a FERC directive

1. Project 2007-17.4: PRC-005 FERC Order No. 803 Directive⁸
2. Project 2010-04.1: MOD-031 FERC Order No. 804 Directive⁹

⁶ This project was continued to address a directive from a FERC Order. Because the timing was relatively short between filing and approval of the standard, the same standard drafting team was kept in place and the original SAR was revised.

⁷ This project was put on hold until Project 2014-03 (TOP/IRO Revisions) was filed with the applicable governmental authorities. This project began in Q2 of 2015.

^{8,9} This project was continued to address a directive that came out from a FERC order. Because the timing was relatively short between filing and approval of the standard, the same standard drafting team was kept in place and the original SAR was revised.

2016 Projects

Projects Continuing from 2015 into 2016

The following projects are planned to continue from 2015 along with any 2015 projects that are planned to be completed in that year but need additional time. As in the 2015–2017 RSDP, the approach to prioritizing Reliability Standards projects in this RSDP addressed how Reliability Standard family priorities are applied to individual projects and outstanding work. Specific elements included: (1) RISC Category Rankings; (2) regulatory directives; (3) regulatory deadlines; (4) Reliability Standard requirement candidates for retirement; (5) the IERP content and quality assessments; and (6) additional considerations (fill-in-the-blank status and five-year assessment commitments). The prioritization gave primary consideration to RISC category rankings, regulatory directives, and regulatory deadlines. Based on the application of these elements, this section prioritizes each Reliability Standard project as high, medium, low, or pending technical committee input.

High Priority

- Project 2009-02: Real-time Reliability Monitoring and Analysis Capabilities (Target: February 2016 Board)*
 - Two FERC directives
 - RISC: high-priority area (Monitoring and Situational Awareness)
 - IERP considerations: risks not adequately mitigated for situational awareness tools, such as real-time contingency analysis (RTCA) in energy management systems (EMS) (recommendation 22 of the 2003 Blackout)
- Project 2015-07: Internal Communications Capabilities FERC Order No. 808 Directive
 - Two FERC directives
 - RISC: high-priority area (workforce capability and human error)
 - IERP considerations: minor quality and content
- Project 2010-07.1: FAC-003: Vegetation Management
 - One FERC directive
 - RISC: low-priority area (transmission right of way)
 - IERP considerations: minor quality and content
- Project 2015-10: Single Points of Failure TPL-001
 - This project will address two directives and consider other improvements to TPL-001-4 — Transmission System Planning Performance Requirements. There are no remaining time-sensitive directives.
 - From FERC Order No. 786
 - Paragraph 40 directs NERC to modify Reliability Standard TPL-001-4 to address the concern that the six-month threshold could exclude planned maintenance outages of significant facilities from future planning assessments.
 - Paragraph 89 directs NERC to consider a similar spare equipment strategy for stability analysis upon the next review cycle of Reliability Standard TPL-001-4.
 - RISC: high-priority area (protection systems)
 - IERP considerations: minor quality and content on possible P81 candidates

Medium Priority

- Project 2010-05.3: Phase 3 of Protection Systems – remedial action schemes (RASs) (Target: February 2016 Board)
 - No FERC directives
 - RISC: high-priority area (protection systems)
 - IERP considerations: minor quality and content
- Project 2014-02: Critical Infrastructure Protection¹⁰
 - No FERC directives
 - RISC: high priority area (cyber attack)
 - IERP considerations: N/A
- Project 2015-08: Emergency Operations
 - No FERC directives
 - RISC: medium-priority area (coordinated attack on multiple facilities), low-priority areas (extreme weather/acts of nature and electro-magnetic pulse (EMP))
 - IERP considerations: minor quality and content on possible P81 candidates
- Project 2015-09: System Operating Limits
 - No FERC directives
 - RISC: high-priority area (Situational Awareness)
 - IERP considerations: minor quality and content on possible P81 candidates

Projects to be Initiated in 2016

The following projects are expected to be initiated in 2016. Not all projects have SARs. The missing SARs will be developed and presented to the Standards Committee prior to beginning them.

- EPRs that recommend revisions to standards
- Emerging risks, if any (with input from the RISC on whether a standard is needed)
- Potential modifications to existing standards if FERC directives are issued

Enhanced Periodic Reviews

The following EPRs are planned to begin in 2016–2017 based on NERC and the Standards Committee prioritization and the development of project plans to ensure projects are developed at a measurable and sustainable pace. Their scheduling and timing depends on the completion of the standard projects discussed earlier. The EPR teams will use the EPR template approved by the Standards Committee on September 30, 2014, or as subsequently revised and approved by the Standards Committee. The EPR teams shall also take into account the work of the Risk-Based Registration initiative and modify the standard or standards accordingly.

¹⁰ The existing Project 2014-02 Standard Drafting Team is tasked with addressing Version 5 transition issues and therefore there may be a standards development project in 2016.

An initial set of possible EPR candidates is listed here. This initial set was developed by Standards Committee leadership and NERC staff based on effective dates of the NERC Reliability Standards, breadth and depth of modifications made by recent revisions, and standards not under current development

- BAL and INT families (BAL-001 and INT-004, INT-006, INT-009, and INT-010)
- EOP-001, EOP-002, and EOP-003
- EOP-010 (as a one-off)¹¹
- FAC-008-3 (as a one-off)
- NUC-001-3 (as a one-off)
- PER-001, PER-003, and PER-004
- PRC families
- VAR-001 and VAR-002

Interpretations

Pursuant to Section 7 of the Standard Processes Manual (SPM), there may be requests for interpretations that are accepted by the Standards Committee toward the end of 2015 and beyond. Those requests would begin based on NERC and the Standards Committee prioritization and the development of project plans to ensure projects are developed at a measurable and sustainable pace, consistent with the criteria to prioritize standard projects that are included in this list.

¹¹ One-off refers to an enhanced periodic review which focused on one standard.

Enhanced Periodic Review Guidelines¹²

Many factors must be considered in developing the plan to conduct EPRs. As the reviews provide a wider view of the standards to determine whether a particular group of standards is effective, the first task is how to group standards for review. For example, it may be reasonable to review standards by looking at the entire standards family, but it may also make sense to look at reliability actions that cut across standards or by sections of standards that relate to each other.¹³

The next task is whether the group of standards is eligible for an update. Eligibility may be affected by additional projects that may be conducted. Once the eligibility tasks have been made for groups of standards, a prioritization must be determined.

Standards Eligibility

The criteria below are used to assist in the determination of eligibility to conduct the EPRs for standards for 2016, 2017, and 2018.

Criteria for What Makes a Standard Eligible:

- All requirements of a Reliability Standard have been in effect, based on the implementation/compliance dates approved by the applicable governmental authority, for at least a year. In some instances, a standard may be eligible if it has been a year since the effective date of the order¹⁴ approving that standard if entities are “early adopting” the requirements as they implement their programs to prepare for the effective date. Examples of standards that meet this criterion for the 2016 EPRs are:
 - NUC-001-3 and NUC-001-2.1: NUC-001-2.1 was effective 4/1/2013 and NUC-001-3 will be effective 1/1/2016. The changes to NUC-001-3 were not significant (e.g., they were related to capitalization of terms, deleting unneeded terms).
- Compliance expectations are not clear or the standard is not being consistently monitored.
- Feedback loops indicate risk (e.g., Event Analysis lessons learned).

¹²Per Section 13 of the SPM, all Reliability Standards shall be reviewed at least once every ten years from the effective date of the Reliability Standard or the date of the latest Board of Trustees adoption to a revision of the Reliability Standard, whichever is later. If a Reliability Standard is approved by the American National Standards Institute (ANSI) as an American national standard, it shall be reviewed at least once every five years from the effective date of the Reliability Standard or the date of the latest Board of Trustees adoption to a revision of the Reliability Standard, whichever is later.

The RSDP shall include projects that address this five- or ten-year review of Reliability Standards.

- If a Reliability Standard is nearing its five- or ten-year review and has issues that need resolution, then the Reliability Standards Development Plan shall include a project for the complete review and associated revision of that Reliability Standard that includes addressing all outstanding governmental directives, all approved interpretations, and all unresolved issues identified by stakeholders.
- If a Reliability Standard is nearing its five- or ten-year review and there are no outstanding governmental directives, interpretations, or unresolved stakeholder issues associated with that Reliability Standard, then the RSDP shall include a project solely for the “five-year review” of that Reliability Standard.

While the main work in the next three years will be the continuation of research and conducting of the enhanced periodic reviews with consideration of the topics discussed below, there may be risks identified for which projects may need to be initiated.

¹³ The IERP developed one approach to grouping standards.

¹⁴ “Effective date” and “issue date” are different, so this must be considered.

- Outstanding Paragraph 81 requirements that may not have been addressed.
- The implementation of the *Standards Independent Experts Review Project - Final Report* recommendations.¹⁵
- Per the SPM, standards will go through a review at least once every 10 years for non-ANSI¹⁶-approved standards and every five years for ANSI-approved standards.

Criteria for What Makes a Standard Not Eligible:

- A standard that is currently in standards development or is scheduled to undergo standards development that will likely result in significant revisions of the standard currently in effect.
 - Standards development here includes the standard:
 - being in a standards development project;
 - being adopted by the NERC Board of Trustees;
 - pending regulatory filing;
 - being filed with regulatory agencies; or
 - being approved by regulatory agencies but not yet in effect.

Prioritization

Specific elements considered in the prioritization of the EPRs include:

1. RISC category rankings
2. Feedback on risk
3. Outstanding regulatory directives with deadlines
4. Outstanding regulatory directives
5. Outstanding requirements that are candidates for retirement
6. *Standards Independent Experts Review Panel - Final Report* content and quality assessments

Feedback Loops (Factors for Consideration of Risk)

The following feedback loops, or factors for consideration, will assist in keeping the workload steady by prioritizing (a) the projects not having a one-year deadline, and (b) compliance input built earlier into the project's timeline. Projects that will have a deadline will be dictated by any FERC directives that have a filing due date specific in a Final Rule.

Emerging Risks and Changing Technologies

The RISC, IVGTF, and ERSTF are three important committees or task forces focusing on emerging risks and changing technologies. They will need to be involved during the beginning of 2016 to assist in the EPR for prioritization and technical expertise.

Event Analysis and Compliance Violation Statistics

Event analysis and compliance violation statistics should be reviewed as the EPRs get underway. Lessons learned and statistics from analyzing events will allow teams to review existing requirements to see if there is any correlation between the events and requirements. Violations statistics allow teams to investigate requirements

¹⁵ The Standards IERP final report recommendations can be found here:

http://www.nerc.com/pa/Stand/Standards%20Development%20Plan%20Library/Standards_Independent_Experts_Review_Project_Report.pdf

¹⁶ American National Standards Institute

that are highly violated to identify areas where language may have been misinterpreted and provide training to the industry on the intent of the requirements.

Lessons Learned and Frequently Asked Questions

Lessons learned documents are designed to convey information from NERC's various implementation activities. They are not intended to establish new requirements under NERC's Reliability Standards, to modify the requirements in any existing Reliability Standards, or to provide an interpretation under Section 7 of the SPM. Additionally, there may be other legitimate ways to fulfill the obligations of the requirements that are not expressed in these supporting documents. Compliance will continue to be determined based on language in the NERC Reliability Standards as they may be amended from time to time. Implementation of a lesson learned is not a substitute for compliance with requirements in NERC's Reliability Standards.

Frequently asked questions (FAQs) provide transparency in providing answers to questions asked by entities. The information presented in FAQ documents is intended to provide guidance and is not intended to establish new requirements under NERC's Reliability Standards or to modify the requirements in any existing Reliability Standards.

A standard being the subject of numerous lessons learned or FAQs is an indication that the language in the standard may be ambiguous, interpreted in multiple ways, or does not appropriately capture the risk to reliability.

Rationale and Guidelines

Industry feedback will be encouraged on how these sections relate to the work of the Member Representative Committee's compliance guidance work.

Measures

There have been more requests for guidance to industry on what is expected for measuring performance on standard requirements. This shows that the measures within some standards are not informative enough. The EPRs should include consideration of requests for guidance from industry, and the efforts should have an emphasis on improving measures such that guidance documents or detailed reliability standard audit worksheets (RSAWs) are not needed and the measures are sufficient guidance to industry.

Request for Interpretations

Similar to lessons learned and FAQs, a standard receiving a valid interpretation request may indicate problems with the language of a requirement.

RSAW Development and Compliance Input

In the beginning of 2013, NERC endeavored to develop RSAWs concurrently with standards. The purpose was to post RSAWs within 15 days of a standard being posted to allow industry to consider the compliance approach from auditors as they vote on the standard(s) being balloted.

Audit Feedback

A possible mechanism for auditors or registered entities being audited to provide feedback on a standard could be beneficial to notice issues with standards. During a monitoring process or risk assessment, that feedback could be valuable for standards development work.

Regional Variances

If a regional standard is in effect, or is under consideration for a development project, it should be wrapped into continent-wide Reliability Standards as a regional variance, provided that there is a continent-wide standard that addresses the same subject.

Construct of Standards

The IERP recommendations on a new construct of standards will need to be researched with industry to establish the benefit of realigning the standards. For example, the total transfer capability standards (proposed MOD-001-2) and some of the FAC standards have some overlap. If there is consensus in the industry, a discussion about the standards alignment and where requirements could best reside can take place as part of the EPR discussion.

Surveys and Polls

Surveys and polls could be good outreach tools as the feedback loops are implemented in the beginning of 2016. Questions for the industry, or thoughts on conducting the EPRs, could be an efficient way to collect stakeholders' opinions. Since standards development is on a more measurable approach and not on a track to accomplish "X amount of projects a year," this will be important feedback to ensure industry resources are not strained and the prioritization of projects and EPRs addresses projects/people involved in high-risk areas.

Coordination with the North American Energy Standards Board (NAESB)

NERC routinely coordinates with NAESB on NERC Reliability Standard development and how it may affect some of the NAESB business practices. NAESB monitors various NERC projects and the coordination between NERC and NAESB will continue.