

April 13, 2015

**VIA OVERNIGHT MAIL**

Sheri Young, Secretary of the Board  
National Energy Board  
517 – 10<sup>th</sup> Avenue SW  
Calgary, Alberta  
T2R 0A8

RE: *North American Electric Reliability Corporation*

Dear Ms. Young:

The North American Electric Reliability Corporation (“NERC”) hereby submits North American Electric Reliability Corporation Informational Filing of Reliability Standards Development Plan 2015-2017. NERC requests, to the extent necessary, a waiver of any applicable filing requirements with respect to this filing. This filing is for informational purposes only.

Please contact the undersigned if you have any questions.

Respectfully submitted,

/s/ Holly A. Hawkins

Holly A. Hawkins  
*Associate General Counsel for the North  
American Electric Reliability Corporation*

Enclosure

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**BEFORE THE  
NATIONAL ENERGY BOARD**

**NORTH AMERICAN ELECTRIC )  
RELIABILITY CORPORATION )**

**NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION  
INFORMATIONAL FILING OF RELIABILITY STANDARDS DEVELOPMENT PLAN  
2015-2017**

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April 13, 2015

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**Attachment A**      *Reliability Standards Development Plan: 2015-2017*

**BEFORE THE  
NATIONAL ENERGY BOARD**

**NORTH AMERICAN ELECTRIC )  
RELIABILITY CORPORATION )**

**NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION  
INFORMATIONAL FILING OF RELIABILITY STANDARDS DEVELOPMENT PLAN  
2015-2017**

The North American Electric Reliability Corporation (“NERC”) hereby submits its 2015-2017 Reliability Standards Development Plan (“2015 Development Plan”) in accordance with Section 310 of the NERC *Rules of Procedure*.<sup>1</sup> The 2015 Development Plan, provided as Attachment A, provides an update on the status of projects and a high-level forecast of future work to be undertaken by NERC and industry participants throughout the upcoming year, and it is submitted for informational purposes only. The NERC Board of Trustees approved the 2015 Development Plan on November 13, 2014.

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<sup>1</sup> Section 310 of NERC’s *Rules of Procedure* require NERC to develop and provide an annual Reliability Standards Development Plan for development of Reliability Standards to the Applicable Governmental Authorities. 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**

In 2006, NERC developed an initial version of a plan for Reliability Standards development entitled the *Reliability Standards Development Plan: 2007–2009*. NERC has since updated the plan annually, and the 2015–2017 version of the plan is presented in this filing. Consistent with previous versions, the 2015 Development Plan is filed for informational purposes, and no specific action is requested.

The 2015 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 Reliability Standards Development Plan (“RSDP”), NERC obtained industry input on the 2015 Development Plan, including input on potential future Reliability Standards development projects and development and use of an Enhanced Periodic Review Template. The Enhanced Periodic Review Template will provide a consistent basis from which to develop a metric that reflects the quality and content of the NERC Reliability Standards during periodic reviews of Reliability Standards.<sup>2</sup> Overall, the 2015 Development Plan accounts for the majority of the work necessary to bring the NERC Reliability Standards to “steady-state.”<sup>3</sup> To this end, the 2015 Development Plan addresses Federal Energy Regulatory Commission (“FERC”) directives, Paragraph 81<sup>4</sup> criteria adjustments, and the Independent Experts Review Panel (“IERP”) recommendations for retirement,<sup>5</sup> and it takes into consideration other initiatives such as the development and implementation of results-based standards.

NERC submits this filing to inform the applicable governmental authorities and other interested parties of various changes to the content of the 2014-2016 Reliability Standards

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<sup>2</sup> The creation of the Enhanced Periodic Review Template fulfills a February 6, 2014 request from the NERC Board of Trustees for NERC management and the leadership of the Standards Committee to develop a mutually-acceptable metric for 2015-2017, including a content and quality grading system for the Reliability Standards. The concept of creating the template was discussed by the Corporate Governance and Human Resources Committee on March 20, 2014. The minutes for the March 20, 2014 meeting, where the creation of the template was discussed, is available at: <http://www.nerc.com/gov/bot/GOV/Board%20of%20Trustees%20Governance%202013/Minutes%20-%20CGHRC%20Open%20Call%20-%20March%2020,%202014.pdf>.

<sup>3</sup> For purposes of the 2015 Development Plan, “steady-state” means a stable set of clear, concise, high quality, and technically sound Reliability Standards that are results-based.

<sup>4</sup> “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...”).

<sup>5</sup> NERC retained a group of industry experts, referred to as the IERP, to independently review NERC Reliability Standards and produce a report, setting a foundation for a plan that will result in a set of clear, concise, and sustainable body of Reliability Standards (“IERP Report”). In this report, the IERP provides various recommendations, including suggestions for retirement of certain requirements in various Reliability Standards. The IERP report can be accessed online at: [http://www.nerc.com/pa/Stand/Standards%20Development%20Plan%20Library/Standards\\_Independent\\_Experts\\_Review\\_Project\\_Report.pdf](http://www.nerc.com/pa/Stand/Standards%20Development%20Plan%20Library/Standards_Independent_Experts_Review_Project_Report.pdf).

Development Plan (“2014 Development Plan”), including changes in project timelines and completion dates originally outlined in the 2014 Development Plan that are now included in the 2015 Development Plan.

### **III. 2015 DEVELOPMENT PLAN**

#### **A. Summary of 2015 Development Plan**

The 2015 Development Plan continues to incorporate the foundational elements of NERC development as established by previous development plans, identifying the current strategies and priorities for development and modification of NERC Reliability Standards in the immediate three-year time horizon. The 2015 Development Plan also includes several significant incremental improvements to NERC Reliability Standards that will assist in facilitating the transformation of NERC Reliability Standards to “steady-state.” Ultimately, this transition will produce a set of clear, concise, high quality, and technically sound standards and will allow more time and resources for thorough periodic reviews to continuously improve the quality of existing Reliability Standards.

The 2015 Development Plan continues to emphasize addressing outstanding regulatory directives, the application of Paragraph 81 criteria, and results-based concepts to all existing and future Reliability Standard projects. In an improvement to prior versions, the 2015 Development Plan provides an overview of each Reliability Standard family with respect to its status on the path to “steady-state.” The 2015 Development Plan also prioritizes future projects with consideration of, among other things, the rankings of NERC’s Reliability Issues Steering Committee (“RISC”), regulatory directives and deadlines, and the 2013 IERP report.<sup>6</sup>

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<sup>6</sup> 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. The IERP Report is available at:

Because much of the work towards “steady-state” has been completed, the 2015 Development Plan is focused on a smaller number of total Projects compared to the 2014 Development Plan. The 2014 Development Plan identified 26 projects for completion in 2014, and an additional four projects were added in response to FERC directives (address potential impacts of Geomagnetic Disturbances, revise certain cyber security standards, revise certain TOP/IRO Reliability Standards, and address physical security concerns). Twenty (20) of the projects anticipated for completion in 2014 were completed in 2014 and ten (10) will continue into 2015. The 2015 Development Plan also identifies four new projects, notwithstanding any new FERC directives or additional work that was not completed in 2014.

Finally, completion of the work to transform the standards to “steady-state” provides an opportunity for an overall strategic review of existing NERC Reliability Standards. This process will be guided in part by the IERP report analysis and the use of the Enhanced Periodic Review Template. This process of strategic review will allow for greater industry stakeholder interaction into the work initiated by the IERP, as it asks critical questions such as whether the standards are addressing the critical risks to reliability of the Bulk-Power System through either prevention or remediation of the issues, whether the standards are being effective, and whether the standards are clear.



## **B. Project Schedule and Timeline Updates**

### **1. 2014 Progress Report**

Below is an update on the status of projects identified in the 2014 Development Plan.

The 2014 Development Plan identified a total of thirteen (13) active issues<sup>7</sup> to be addressed over a three-year period, and of these thirteen, the following eleven (11) projects were listed in the 2014 Development Plan:

- Project 2008-02 Undervoltage Load Shedding and Underfrequency Load Shedding
- Project 2007-11 Disturbance Monitoring
- Project 2009-02 Real-Time Reliability Monitoring and Analysis Capabilities<sup>8</sup>
- Project 2009-03 Emergency Operations
- Project 2010-02 Connecting New Facilities to the Grid
- Project 2010-05.2 Phase 2 of Protection System Misoperations: SPS/RAS
- Project 2010-08 Functional Model Glossary Revisions<sup>9</sup>
- Project 2010-14.2 Periodic Review and Revisions of BAL-004, BAL-005 and BAL-006
- Project 2012-09 Implementation of IRO Five-year Review Recommendations
- Project 2012-13 NUC Review and Implementation
- Project 2013-03 Geomagnetic Disturbance Mitigation Measures (Stage 2)

In addition to the projects listed in the 2014 Development Plan, the following projects address issues that were included in the 2014 Development Plan as “pending technical committee input”:

- Project 2007-17.3 Protection System Maintenance and Testing Auxiliary Relays<sup>10</sup>
- Project 2010-13.3 Generator Relay Loadability Stable Power Swings<sup>11</sup>

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<sup>7</sup> The thirteen active issues identified by the 2014 Development Plan include eleven (11) projects that were listed as current projects in the 2014 Development Plan and two (2) projects that were listed as “pending technical committee input.” See 2014 Development Plan at 7.

<sup>8</sup> In the 2015 Development Plan, NERC noted that Project 2009-02 (Real-Time Reliability Monitoring and Analysis Capabilities) was being “consolidated into Project 2014-03 (Revisions to TOP/IRO Reliability Standards)” with a filing deadline of January 31, 2015. Since approval of the 2015 Development Plan, NERC has decided to proceed with the separate Real-Time Reliability Monitoring and Analysis Capabilities.

<sup>9</sup> Since final approval of the 2015 Development Plan, NERC has withdrawn Project 2010-08 (Functional Model Glossary Revisions) from formal development.

<sup>10</sup> Work is ongoing in connection with the technical committee input.

<sup>11</sup> The technical committee input is complete and was utilized in the development of Reliability Standard PRC-026-1. This proposed Reliability Standard was adopted by the NERC Board of Trustees on December 17, 2014.

The 2014 Development Plan also identified several projects that were listed in the 2013-2015 RSDP but that were carried over to the current plan for continued development.<sup>12</sup> The 2014 Development Plan projected that all of these projects, with the exception of one, are complete or would be complete by the end of 2014, including the following:

- Project 2007-02 Operating Personnel Communications Protocol
- Project 2007-06 System Protection Coordination
- Project 2008-12 Coordinate Interchange Standards
- Project 2010-01 Operations Personnel Training
- Project 2010-03 Modeling Data – MOD B
- Project 2010-04 Demand Data – MOD C
- Project 2010-05.1 Phase 1 of Protection Systems: Misoperations
- Project 2010-14.1 Phase 1 of Balancing Authority Reliability-Based Control: Reserves
- Project 2012-05 ATC Revisions – MOD A
- Project 2013-04 Voltage and Reactive Control

Finally, the following projects were in progress in 2014 but were not included in the 2014 Development Plan because they were initiated during 2014 as a result of a reliability need or to respond to a FERC directive in an Order or concerns raised in a Notice of Proposed Rulemaking:

- Project 2014-01 Standards Applicability for Dispersed Generation Resources
- Project 2014-02 CIP Version 5 Revisions
- Project 2014-03 Revisions to TOP/IRO Standards
- Project 2014-04 Physical Security

Of the projects listed above, development of the following eleven projects that were in progress in 2014 will continue into 2015:

- Project 2008-02 Undervoltage Load Shedding and Underfrequency Load Shedding
- Project 2009-02 Real-Time Reliability Monitoring and Analysis Capabilities<sup>13</sup>
- Project 2010-05.2 Phase 2 of Protection System Misoperations: SPS/RAS
- Project 2010-14.1 Phase 1 of Balancing Authority Reliability-based Controls: Reserves
- Project 2010-14.2 Periodic Review and Revisions of BAL-004, BAL-005 and BAL-006

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<sup>12</sup> These projects were also included in the 2014-2016 RSDP in the 2013-2015 Progress Report section.

<sup>13</sup> As noted in footnote 9 above, NERC suggested in the 2015 Development Plan that Project 2009-02 (Real-Time Reliability Monitoring and Analysis Capabilities) was being “consolidated into Project 2014-03 (Revisions to TOP/IRO Reliability Standards)” with a filing deadline of January 31, 2015. However, the projects will remain separate projects. Project 2009-02 (Real-Time Reliability Monitoring and Analysis Capabilities) is currently in informal development.

- Project 2012-09 Implementation of IRO Five-year Review Recommendations
- Project 2007-06 System Protection Coordination
- Project 2007-06.2 PRC-001
- Project 2014-01 Standards Applicability for Dispersed Generation Resources (Medium Priority)
- Project 2014-02 CIP Version 5 Revisions
- Project 2014-03 Revisions to TOP/IRO Standards<sup>14</sup>
- Project 2014-04 Physical Security Directives

## 2. New 2015 Projects and Prioritization

For each new Reliability Standard project listed in the 2015 Development Plan, the Standards Committee has assigned a priority of High, Medium, Low, or pending technical committee input.<sup>15</sup> The prioritizations included in the 2015 Development Plan are made in addition to the priority assignments assigned in previous plans, and they are based on, among other things, RISC Category Rankings, regulatory directives, regulatory deadlines, and recommendations from the IERP Report.

There are currently no projects that have been identified as High priority. One project, Project 2015-04 Alignment of Glossary of Terms used in NERC Reliability Standards and the Definitions used in the Rules of Procedure (Rules of Procedure Appendix 2), has been identified as Low priority. The remaining new projects added to the 2015 Development Plan have been identified as Medium priority projects, and these include:

- Project 2015-01 TPL Directives;
- Project 2015-02 Periodic Review of EOP-004, EOP-005, EOP-006, and EOP-008; and

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<sup>14</sup> On November 13, 2014, 10 of the 11 Reliability Standards (TOP-002-4, TOP-003-3, IRO-001-3, IRO-002-4, IRO-008-2, IRO-010-2, IRO-014-3, and IRO-017-1) were presented to the NERC Board of Trustees for adoption, and development of the one remaining standard, Reliability Standard TOP-001-3, will continue into 2015.

<sup>15</sup> As noted on page 10 of the 2015 Development Plan (included as Attachment A hereto), the prioritization does not include projects in progress at year-end 2014 and does not include any new projects initiated consistent with the Standard Processes Manual (SPM), including those developed in response to FERC directives issued after August 2014 or those which implement recommendations from the Risk-Based Registration initiative.

- Project 2015-03 Periodic Review of System Operating Limit Standards (FAC-010, FAC-011, and FAC-014).

#### IV. CONCLUSION

As discussed above, the 2015 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: April 13, 2015

## **ATTACHMENT A**

(Available on the NERC Website at

<http://www.nerc.com/FilingsOrders/ca/Canadian%20Filings%20and%20Orders%20DL/RSDP%20Errata%20Attachments.pdf>)