

January 31, 2013

**VIA ELECTRONIC FILING**

Ms. Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, D.C. 20426

**Re: Analysis of NERC Standard Process Results, Fourth Quarter 2012  
Docket Nos. RR06-1-000, RR09-7-000**

Dear Ms. Bose:

The North American Electric Reliability Corporation (“NERC”) hereby submits its Analysis of NERC Standards Process Results for the Second Quarter 2012 (“Ballot Results Analysis”). This filing is submitted in response to the Federal Energy Regulatory Commission’s (“FERC” or the “Commission”) January 18, 2007 Order<sup>1</sup> requiring NERC to closely monitor and report the voting results for NERC Reliability Standards each quarter for three years and the Commission’s subsequent order issued on September 16, 2010, whereby the Commission renewed and expanded on its directive for an additional three years.<sup>2</sup>

The Ballot Results Analysis is attached hereto and addresses ballot results during the October 1, 2012 through December 31, 2012 timeframe, and includes NERC’s analysis of the voting results, including trends and patterns of stakeholder approval of NERC Reliability Standards. NERC requests that the Commission accept this compliance filing in accordance with the directive in the September 16, 2010 Order to submit quarterly reports for an additional three years from the date of the order.

Respectfully submitted,

/s/ Stacey Tyrewala

Stacey Tyrewala

*Attorney for North American Electric Reliability  
Corporation*

cc: Official service list in Docket No. RR06-1-000; RR09-7-000

<sup>1</sup> Order on Compliance Filing, 118 FERC ¶ 61,030 at P 18 (2007).

<sup>2</sup> Order on the Electric Reliability Organization’s Three-Year Performance Assessment, 132 FERC ¶ 61,217 at P 85 (2010).

**NERC**

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

# Analysis of NERC Standards Process Results

Fourth Quarter 2012

January 31, 2013

**RELIABILITY | ACCOUNTABILITY**



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## Introduction

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### Background: NERC's Processes for Developing Standards

NERC develops Reliability Standards in accordance with Section 300 of its Rules of Procedure and the NERC *Standard Processes Manual*, which is included as Appendix 3A to the NERC Rules of Procedure.<sup>1</sup> The current *Standard Processes Manual* (“SPM”) was approved by the Federal Energy Regulatory Commission (“FERC” or the “Commission”) in September 2010<sup>2</sup> and amended in August 2011.<sup>3</sup> NERC is in the midst of changes to its standard development processes, and is using the experience gained through implementing the SPM and earlier versions of NERC’s standard development process to foster the success of future changes.

Many of the standards projects currently in development either were initiated under the predecessor processes and continued under the SPM, or were initiated under the SPM but have not yet been completed.

### This Report

This report is responsive to directives from FERC directing NERC to monitor, analyze, and report on the results of its standards development process.<sup>4</sup>

At the end of each calendar quarter, NERC updates this report by incorporating results from the most recent calendar quarter, to monitor and report progress on improvements to various aspects of the standards development process. The first section of this report provides an overview and analysis of ballots conducted during the fourth quarter of 2012. The second section compares timelines for the projects balloted in the fourth quarter of 2012 against baselines provided in the report filed on January 31, 2011, based on the time required to complete each phase of standards development. The comparison to the historical baselines is responsive to the Commission’s directive to analyze the time required to complete each phase of the standards development process. NERC staff and the Standards Committee use this analysis to monitor successes and to identify opportunities for improvements.

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<sup>1</sup> NERC’s Rules of Procedure are available at: <http://www.nerc.com/page.php?cid=1|8|169>.

<sup>2</sup> *Order Approving Petition and Directing Compliance Filing*, 132 FERC ¶ FERC 61,200 (2010).

<sup>3</sup> *Letter Order Approving Standard Processes Compliance Filing* (August 25, 2011).

<sup>4</sup> See *Order on Compliance Filing*, 118 FERC ¶ 61,030 (2007). See also, *Order on the Electric Reliability Organization’s Three-Year Performance Assessment*, 132 FERC ¶ 61,217 at P 85 (September 16, 2010) (“Three-Year Assessment Order”). Specifically, the Three-Year Assessment Order directed NERC to analyze:

- (i) the time required to complete projects (excluding urgent action projects);
- (ii) the time required to complete projects initiated in response to NERC’s urgent action progress (including whether or not a permanent fix was implemented within the sunset period); and
- (iii) the time required to complete projects in response to Commission directives. The analysis should include data on the time required for each stage of the process. For example, the analysis should document the time required to move a proposed Reliability Standard from a Standards Authorization Request to the NERC Board, and then to the Commission.

## Analysis of Q4 2012 Standards Ballot Results

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From October 1, 2012 through December 31, 2012, NERC conducted ballots of 22 standards, three interpretations, 19 new or revised definitions, and one project that proposed retirements of requirements in 22 standards. NERC also conducted 10 non-binding polls of Violation Risk Factors (VRFs) and Violation Severity Levels (VSLs), along with one non-binding poll for a set of revisions to outstanding VRFs and VSLs in 29 standards.

Seven projects (encompassing 17 standards, one interpretation, and revisions to outstanding VRFs and VSLs in 29 standards) include standards that have completed the technical input and stakeholder consensus phase in the fourth quarter of 2012.

Of those, 11 standards were adopted by the Board in November 2012 and are pending regulatory filing: PRC-005-2 (developed under Project 2007-17) and 10 CIP Version 5 Standards (CIP-002-5 through CIP-009-5, CIP-010-1, and CIP-011-1, developed under Project 2008-06). Another standard, EOP-004-2 (developed under Project 2009-01), was also adopted by the Board in November 2012 and was filed with FERC in December 2012.

An interpretation to BAL-002-0 R4 and R5 (developed under Project 2009-19) was also approved by the Board in November 2012 and is pending regulatory filing. The revisions to outstanding VRFs and VSLs were approved by the Board in December 2012 and will also be filed with applicable regulatory authorities in 2013.

Five standards balloted during the fourth quarter 2012 have completed recirculation ballot and are pending Board approval: MOD-025-2, MOD-026-1, MOD-027-1, and PRC-019-1 (developed under Project 2007-09), and BAL-003-1 (developed under Project 2007-12).

Seven projects balloted during the fourth quarter of 2012 (encompassing five standards, two interpretations, and the 22-standard Paragraph 81 requirement retirement project) were ongoing at the end of the quarter.

Table 1 summarizes these ballot events. A complete record for each project is available on NERC's website on the Ballot Results webpage.<sup>5</sup>

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<sup>5</sup> The Ballot Results webpage is available at: <https://standards.nerc.net/Ballots.aspx>.

**Table 1**

<b>Project Type<sup>6</sup></b>	<b>Project Number &amp; Name</b>	<b>Q4 Ballot Events</b>	<b>Status</b>
<b>New</b>	2007-02 Operating Personnel Communications Protocols	Successive ballot and non-binding poll of VRFs and VSLs for one standard (COM-003-1)	Ongoing
<b>New</b>	2007-06 System Protection Coordination	Successive ballot and non-binding poll of VRFs and VSLs for one standard (PRC-027-1)	Ongoing
<b>Revision</b>	2007-09 Generator Verification	Successive ballot of one standard (PRC-024-1); successive and recirculation ballots of four additional standards (MOD-025-2, MOD-026-1, MOD-027-1, PRC-019-1); non-binding polls of VRFs and VSLs for all five standards	Four standards will be presented to the Board in February 2013; development of PRC-024-1 is ongoing
<b>Revision</b>	2007-12 Frequency Response	Successive and recirculation ballot of one standard (BAL-003-1); one non-binding poll of VRFs and VSLs	Will be presented to the Board in February 2013
<b>Revision</b>	2007-17 Protection System Maintenance & Testing	Recirculation ballot of one standard (PRC-005-2)	Adopted by NERC Board in November 2012; pending regulatory filing
<b>Revision</b>	2008-06 Cyber Security	Successive and	Adopted by NERC Board in

<sup>6</sup> Appendix A to this report provides a brief description of each type of standards project.

Project Type <sup>6</sup>	Project Number & Name	Q4 Ballot Events	Status
	Order 706 (CIP Version 5)	recirculation ballots of ten standards (CIP-002-5 through CIP-009-5, CIP-010-1, and CIP-011-1) and 19 new or revised definitions; one non-binding poll of VRFs and VSLs	November 2012; pending regulatory filing
<b>Revision</b>	2009-01 Disturbance and Sabotage Reporting	Recirculation ballot and non-binding poll of VRFs and VSLs for one standard (EOP-004-2)	Adopted by NERC Board in November 2012; filed with FERC in December 2012
<b>Revision</b>	2010-11 TPL footnote b	Initial ballot of two standards (TPL-001-2a and TPL-002-1c) <sup>7</sup>	Ongoing
<b>Revision</b>	2013-02 Paragraph 81	Initial ballot of retirements to requirements in 22 standards	Ongoing
<b>Revision</b>	Revisions to Outstanding VRFs and VSLs	Non-binding poll of revisions to a set of outstanding VRFs and VSLs in 29 standards	Adopted by NERC Board in December 2012; pending regulatory filing
<b>Interpretation</b>	2009-19 Interpretation of BAL-002-0 R4 and R5 by NWPP Reserve Sharing Group	Recirculation ballot of one interpretation	Adopted by NERC Board in November 2012; pending regulatory filing
<b>Interpretation</b>	2012-INT-02 Interpretation of TPL-003-0a and TPL-004-0 for	Initial ballot of one interpretation	Ongoing

<sup>7</sup> When work was initiated to revise the footnote in response to the Commission's remand order, these standards were numbered as TPL-001-2a and TPL-002-1c. This numbering is inconsistent with NERC's Standards Numbering Convention, posted at [http://www.nerc.com/files/NERC\\_Standards\\_Numbering\\_Convention\\_2009Sept14.pdf](http://www.nerc.com/files/NERC_Standards_Numbering_Convention_2009Sept14.pdf). The numbering was corrected prior to the recirculation ballot to conform to the Numbering Convention. The correct numbers are TPL-001-3 and TPL-002-2b.

Project Type <sup>6</sup>	Project Number & Name	Q4 Ballot Events	Status
	SPCS		
<b>Interpretation</b>	2012-INT-05 Interpretation of CIP-002-3 for OGE	Initial ballot of one interpretation	Ongoing

Additional detail for the 13 projects that had standards balloted in the fourth quarter of 2012 is provided below. With the exception of Paragraph 81 and Revisions to Outstanding VRFs and VSLs, for each project involving multiple standards, separate ballots were conducted for each standard. NERC has adopted the practice of balloting each standard individually because this approach provides drafting teams with more specific information about which standards require additional development work to reach consensus.

Ballots were conducted in the fourth quarter of 2012 for the following projects:

- Project 2007-02 Operating Personnel Communications Protocols:** This project proposes to remove Requirement R4 from COM-001-1 and Requirement R2 from COM-002-3 for inclusion in a new standard, COM-003-1, to address part of Blackout Recommendation No. 26 and issues in FERC Order 693. A successive ballot of COM-003-1 achieved a high quorum of over 76 percent and weighted segment approval of over 53 percent. The associated non-binding poll for the VRFs and VSLs achieved a quorum of 77 percent and an approval rating of 58 percent. Work to revise the standard in response to stakeholder comments is ongoing.
- Project 2007-06 System Protection Coordination:** PRC-027-1 is a results-based standard to coordinate Protection Systems utilized to protect Interconnected Elements, such that those Protection Systems remove from service only those Elements required to isolate Faults, while meeting the System performance specified within requirements established in other approved NERC Reliability Standards. This standard incorporates and enhances the coordination aspects of Requirements R3 and R4 from PRC-001-1 (now R2 and R3 of PRC-001-2). A successive ballot of PRC-027-1 received a high quorum of over 76 percent and weighted segment of approval of 33 percent. The associated non-binding poll for the VRFs and VSLs achieved a quorum of 76 percent and an approval rating of 35 percent. Work to revise the standard in response to stakeholder comments and successive ballot is ongoing.
- Project 2007-09 Generator Verification:** Project 2007-09 incorporates revisions to two existing standards (MOD-024-1 and MOD-025-1 were incorporated into the proposed MOD-025-2), and the development of four new standards (MOD-026-1, MOD-027-1, PRC-019-1, and PRC-024-1), in order to (1) ensure that generators will not trip off-line during specified voltage and frequency excursions or as a result of improper coordination between generator protective relays and generator voltage regulator controls and limit functions (such coordination will include the generating unit's capabilities); and (2) ensure that generator models accurately reflect the generator's capabilities and operating characteristics. All five standards being revised or developed



were posted for a successive ballot that ended on October 31, 2012. In that ballot, all standards received a high quorum of at least 75 percent. MOD-025-2 received an approval rating of 68 percent; MOD-026-1 received an approval rating of 77 percent; MOD-027-1 received an approval rating of 72 percent; PRC-019-1 received an approval rating of 71 percent; and PRC-024-1 received an approval rating of 57 percent. In an associated non-binding poll for the VRFs and VSLs, all of the polls achieved a quorum of at least 75 percent. The VRFs and VSLs for MOD-025-2 received an approval rating of 64 percent; the VRFs and VSLs for MOD-026-1 received an approval rating of 77 percent; the VRFs and VSLs for MOD-027-1 received an approval rating of 69 percent; the VRFs and VSLs for PRC-019-1 received an approval rating of 64 percent; and the VRFs and VSLs for PRC-024-1 received an approval rating of 52 percent. Additional work on PRC-024-1 is required, and the drafting team has posted the standard for another successive ballot that will end in 2013. The other four standards proceeded to recirculation ballot. In that ballot, MOD-026-1 received a high quorum of 79 percent; PRC-019-1, MOD-027-1, and MOD-025-2 all received a high quorum of at least 85 percent. MOD-025-2 received an approval rating of 73 percent; MOD-026-1 received an approval rating of 79 percent; MOD-027-1 received an approval rating of 74 percent; PRC-019-1 received an approval rating of 73 percent. All of the standards except PRC-024-1 will be presented to the Board for adoption in February 2013. PRC-024-1 is still under development.

- **Project 2007-12 Frequency Response:** The proposed BAL-003-1 would set a minimum Frequency Response obligation for each Balancing Authority, provide a uniform calculation of Frequency Response and Frequency Bias Settings that transition to values closer to natural Frequency Response, and encourage coordinated Automatic Generation Control operation. A successive ballot concluded on November 6, 2012, achieving a high quorum of over 80 percent and a weighted segment approval of over 76 percent. The associated non-binding poll for the VRFs and VSLs achieved a quorum of 76 percent and an approval rating of 76 percent. The recirculation ballot concluded on December 21, 2012 with a high quorum of 86 percent and weighted segment approval of over 76 percent. This standard will be presented to the Board for adoption.
- **Project 2007-17 Protection System Maintenance and Testing:** This project merges requirements from four protection system maintenance standards into a single standard, PRC-005-2. A recirculation ballot of PRC-005-2 achieved a high quorum of 81 percent and ballot approval of approximately 80 percent. The standard was adopted by the Board in November 2012, and is pending regulatory filing.
- **Project 2008-06 Cyber Security Order 706:** In the development of the NERC Version 5 CIP Reliability Standards, the Project 2008-06 Cyber Security Order 706 standard drafting team was charged with addressing all remaining standards-related issues from [FERC Order No. 706](#). The standards provide a cyber security framework for the categorization and protection of Bulk Electric System (BES) cyber systems to support the reliable operation of the BES. In the fourth quarter of 2012, the ten CIP standards (CIP-002-5 through CIP-009-5, CIP-010-1, and CIP-011-1), an associated implementation plan, and 19 new or revised NERC Glossary Terms completed both a successive ballot and a recirculation ballot. The successive ballot, which ended on October 10, 2012, achieved a quorum of about 80 percent for all documents, and at least a 74 percent approval for all documents. The standards and associated documents were approved with high quorum

of about 85 percent and at least a 78 percent approval rating in recirculation ballots that ended on November 5, 2012. Nine of the 12 recirculation ballots passed with over 90 percent approval. A non-binding poll for the standards' VRFs and VSLs was also conducted alongside the recirculation ballot, and those assignments achieved a quorum of 75 percent and about 84 percent approval. The standards and all associated documents were adopted by the Board in November 2012 and are pending regulatory filing.

- **Project 2009-19 Interpretation of BAL-002-0 Requirements R4 and R5:** This interpretation project clarifies the obligations of Balancing Authorities and Reserve Sharing Groups under certain conditions. An initial ballot of the interpretation was conducted in early 2010, but work on the interpretation was curtailed when the Standards Committee supported NERC staff's assessment that an interpretation could not be drafted that conformed to the guidance to interpretation drafting teams that an interpretation rely strictly on the requirements of the standard. In May 2012, the Board provided additional guidance for interpretations, indicating that interpretation drafting teams need not be limited to the language of the requirements in the standard in preparing an interpretation. After receiving this guidance, the project was reactivated. A successive ballot concluded on September 4, 2012. The interpretation achieved a high quorum of over 79 percent and a weighted segment approval of over 87 percent. Work to revise the interpretation in response to stakeholder comments was completed and a recirculation ballot was initiated on September 28, 2012, achieving a high quorum of over 85 percent and a weighted segment approval of over 90 percent. This interpretation was adopted by the Board in November 2012 and is pending regulatory filing.
- **Project 2009-01 Disturbance and Sabotage Reporting:** This project consolidates requirements from CIP-001-2a Sabotage Reporting and EOP-004-1 Disturbance Reporting into a single standard, EOP-004-2. A recirculation ballot of the standard achieved a high quorum of over 85 percent and weighted segment approval of over 71 percent. The associated non-binding poll for the VRFs and VSLs achieved a quorum of 79 percent and an approval rating of 71 percent. The standard was adopted by the Board in November 2012, filed with FERC in December 2012, and is pending regulatory approval.
- **Project 2010-11 TPL Table 1 Order:** This project addresses FERC Order RM06-16-009, which requires the Electric Reliability Organization (ERO) to clarify TPL-002-0, Table 1 — footnote 'b', regarding the planned or controlled interruption of electric supply where a single contingency occurs on a transmission system. The Standard Authorization Request (SAR) provided a revision to TPL Table 1 footnote 'b' to provide clarity to industry with regard to the planned or controlled interruption of electric supply where a single contingency occurs on a transmission system. The referenced table appears in TPL-001, TPL-002, TPL-003, and TPL-004, so while the FERC Order was for TPL-002, the change is reflected in all four standards. The initial ballot for the revisions to a single footnote that were incorporated into two standards (TPL-002-1c— System Performance Following Loss of a Single BES Element as footnote 'b', and TPL-001-2a – Transmission System Planning Performance Requirements as footnote 12) achieved a high quorum of

over 80 percent; the weighted segment approval was over 56 percent. Work to revise the standard in response to stakeholder comments is ongoing.

- **Project 2012-INT-02 Interpretation of TPL-003 and TPL-004:** This interpretation request was submitted by SPCS to address FERC's concern about the study of single point of failure in protection systems, documented in Order No. 754. An initial ballot for the interpretation of TPL-003-0a – System Performance Following Loss of Two or More Bulk Electric System Elements (Category C) and TPL-004-0 – System Performance Following Extreme Events Results in the Loss of Two or More Bulk Electric System Elements (Category D) achieved a high quorum of over 84 percent and weighted segment approval of over 72 percent. Work to revise the interpretation in response to stakeholder comments is ongoing.
- **Project 2012-INT-05 Interpretation of CIP-002-3:** OGE requested interpretation of CIP-002-3 for clarification regarding the applicability of CIP-002-3 to Advanced Meter Infrastructure systems. An initial ballot of the interpretation achieved a high quorum of over 84 percent and weighted segment approval of over 95 percent. Work to revise the interpretation in response to stakeholder comments is ongoing.
- **Project 2013-02 Paragraph 81:** This project is responsive to paragraph 81 of FERC's March 15, 2012 Order issued on NERC's Find, Fix and Track process. The purpose of the project is to retire or modify FERC-approved Reliability Standard requirements that, as FERC noted, "... provide little protection to the reliable operations of the BES...", are redundant or unnecessary, or whose retirement or modification could increase the efficiency of the ERO's compliance programs. The project identifies Reliability Standard requirements that clearly meet the criteria set forth in the SAR and do not require extensive technical research. Future standards projects will incorporate work on Reliability Standard requirements that need additional technical research before retirement or modification. This project achieved a high quorum of over 75 percent; the weighted segment approval was over 96 percent. At the end of the fourth quarter 2012, work to revise the list of requirements being proposed for retirement in response to stakeholder comments was ongoing.
- **Revisions to Outstanding VRFs and VSLs:** Initiated by NERC staff and completed in coordination with FERC staff and stakeholders, this project addresses a set of VRF and VSL assignments in 29 standards that FERC identified as needing possible revision or further justification. In general, the VRFs and VSLs require revision in order to reflect the NERC and FERC VRF and VSL guidelines finalized between 2007 and 2009. The revised assignments were posted for a single 45-day comment period and non-binding poll, and they received 73 percent approval in a poll with a high quorum of just over 78 percent. The revisions were approved by the Board in December 2012 and are pending regulatory filing.

## Q4 2012 Ballots and Comparison to Baseline Data

In the version of this report filed on January 31, 2011, NERC provided baselines for each phase of development for standards projects. These baselines were established by grouping all NERC standards projects from 2006 through 2010 into four categories (new standards, revisions to existing standards, expedited projects, and interpretations) and then averaging the times for each phase of development within each group. Averages were developed by project without consideration to the number of standards associated with each project.

In this section of the report, NERC compares the projects balloted each quarter against these baselines to identify trends in the time required for various phases of standards development. As noted above, during the fourth quarter of 2012, NERC conducted ballots of 22 standards, three interpretations, 19 new or revised definitions, and one project that proposed retirements of requirements in 22 standards. Only standards and interpretations balloted during the fourth quarter of 2012 are included in the chart.

Chart 1 compares the development phases for each of the standards revision projects, including Project 2013-02, which proposed retirements to requirements in 22 standards.

### Q4 2012 Projects to Revise Existing Standards

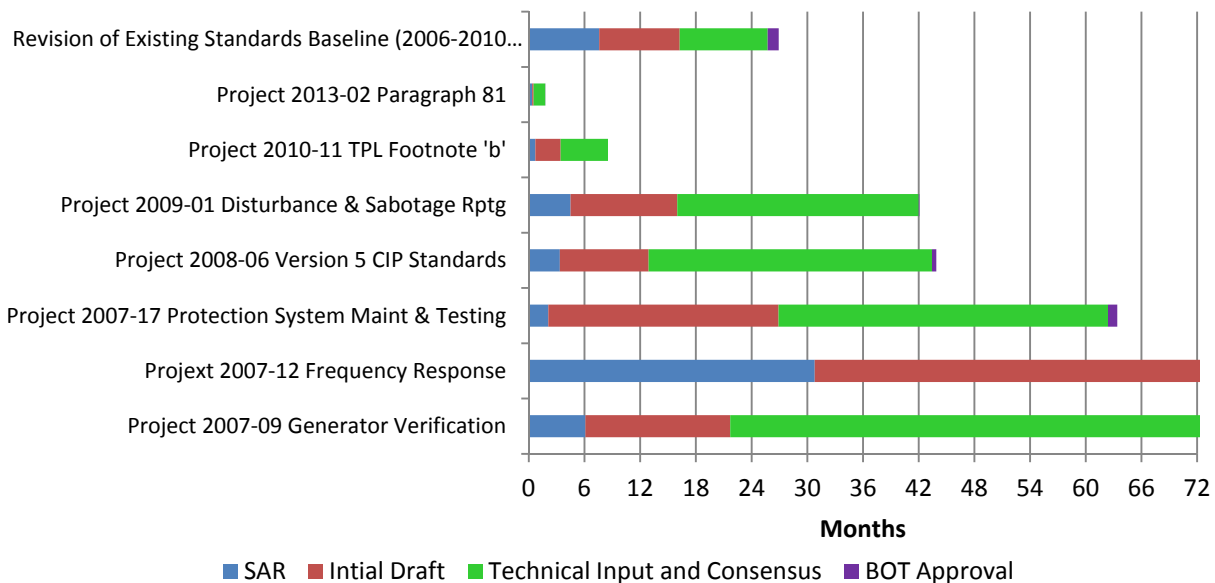


Chart 1

Chart 2 compares the development phases of the two projects to develop new standards that were balloted in the fourth quarter against the baseline for all such projects balloted between 2006 and 2010.

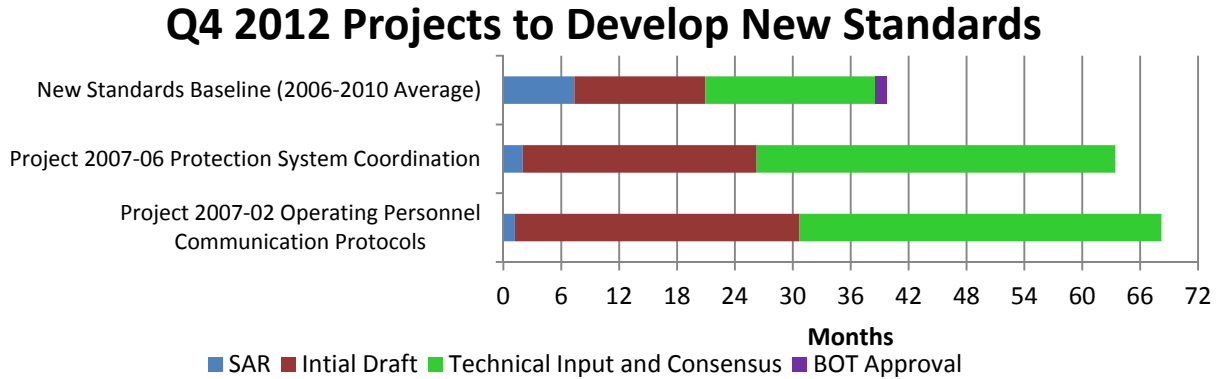


Chart 2

Chart 3 compares the development phases of the three interpretation project balloted in the fourth quarter to the baseline of all interpretations balloted between 2006 and 2010.

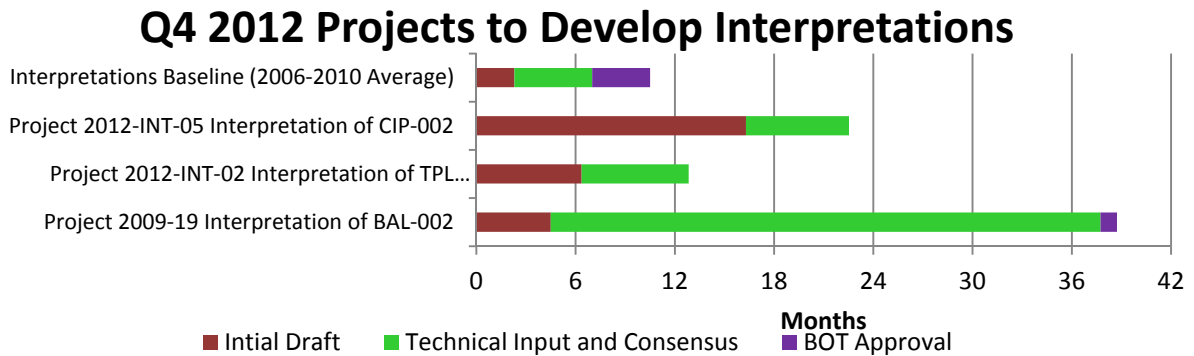


Chart 3

**SAR Development Phase.** For all but one of the standards projects balloted in the fourth quarter of 2012, the SAR was finalized quickly after being posted for industry review. From 2006 to 2010, SAR development times averaged eight months for a project to revise one or more existing standards, and slightly less for projects to develop one or more new standards. Eight of the nine projects that were balloted in the fourth quarter had SAR development phases of about six months or less. Only one project, Project 2007-12 Frequency Response, had a SAR development phase longer than the baseline. This general trend toward the shortening of the SAR development period is expected to continue as consensus on the scope of a project, as well as much of the technical analysis, is expected to be completed prior to the initiation of work on the project.

**Initial Draft Phase.** The 2006-2010 baseline for the initial draft input phase was just under nine months for revision projects, just under 14 months for new standard projects, and just over two months for interpretations. One of the seven revision projects, Project 2010-11 TPL Footnote b, took less than three months to develop the initial draft, and Project 2013-02 Paragraph 81 skipped the initial draft phase and move straight from the informal consensus-building phase into the technical input and consensus phase. All other projects from the fourth quarter of 2012 took longer than the baseline to complete an initial draft. Many of these projects included more than one standard and took only slightly longer than the baseline to complete the technical input phase. For instance, Project 2008-06 revised or developed 10 CIP standards and only took 9.5 months to develop the initial draft, which indicates that NERC is implementing the tools to more efficiently develop initial drafts, even for complicated, large projects. Additionally, changes proposed to drafting team makeup for 2013 and beyond should make the development of an initial draft more efficient; drafting teams will be smaller and more agile and may be in a better position to develop drafts quickly with the informal participation of other industry subject matter experts.

**Technical Input Phase.** Drafting teams seek technical input from the industry through the formal and informal posting periods. Between each posting, the drafting team reviews the feedback received from stakeholders and makes revisions to the standard or standards. For a formal posting, drafting teams are also required to respond to each stakeholder comment. Thus, the technical input phase includes periods of time when standards and associated documents are posted for industry review – typically either for 30 or 45 days – alternating with periods of time during which the drafting team is reviewing the input provided, revising the standards and associated documents, and preparing both individual and summary responses to the comments received. The technical input phase is essentially a highly-organized dialogue between the drafting team and other industry stakeholders.

Seven projects, 2007-09 Generator Verification (with the exception of PRC-024-1), 2007-12 Frequency Response, 2007-17 Protection System Maintenance & Testing, 2008-06 Cyber Security Order 706 (CIP Version 5), 2009-01 Disturbance and Sabotage Reporting, Revisions to Outstanding VRFs and VSLs, and 2009-19 Interpretation of BAL-002-0 R4 and R5 by NWPP Reserve Sharing Group, completed their technical input phase in the fourth quarter of 2012. The standards in those projects are either awaiting Board adoption or pending regulatory filing. For the remaining seven projects, the technical input phase will continue.

The 2006-2010 baseline for the technical input phase was nine-and-a-half months for revision projects, just under 18 months for new standard projects, and just under five months for interpretations. The technical input phases for Project 2013-02 Paragraph 81 and 2010-11 TPL Footnote b are poised to take less time than that to complete the input process, but the technical input phase has taken longer for all other projects.

In 2013 and beyond, changes proposed to the Standard Processes Manual will reduce some of the burden on drafting teams during the technical input phase without eliminating the requirement to review and consider each industry comment. That change, combined with the increased focus on informal consensus building in early stages of the development process, will help reduce the time spent during the formal technical input process.

**Board of Trustee Adoption.** The baseline period of time between ballot pool approval of a standard and Board adoption of the standard is about five weeks. The period of time between ballot pool approval of a standard and Board adoption can vary based on the Board's fixed schedule of face-to-face meetings, but in the fourth quarter of 2012 all standards or interpretations projects that completed ballot pool approval were adopted by the Board in one month or less – a shorter time period than the baseline.

**Filing with Regulatory Authorities.** During the fourth quarter of 2012, two filings to FERC were made for standards projects that required Board adoption.

- On November 21, 2012, a Petition for Approval of Proposed Reliability Standard VAR-002-2b Generator Operation for Maintaining Network Voltage Schedules was submitted in Docket No. RD13-2-000.
- On December 31, 2012, a Petition for Approval of Proposed Reliability Standard EOP-004-2 Event Reporting was submitted in Docket No. RD13-3-000.

## Conclusion

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In the fourth quarter of 2012, NERC has demonstrated its ability to conduct its standards process more efficiently in projects like Project 2013-02 Paragraph 81, Project 2008-06 Version 5 CIP Standards, and Project 2010-11 TPL Footnote b. These projects illustrate the importance of informal consensus building early in the development process, expert project management, and the collaboration of the industry in providing clear, concise, and actionable feedback. Along with continuing to utilize these proven tools for success in 2013 and beyond, NERC has introduced a number of other efforts to modify its standards development process to ensure a clear focus on the efficient production of technically sound Reliability Standards.

NERC has made significant strides toward implementing the Standard Process Input Group's recommendations for improving the standards development process. In large part, that progress is evident in the proposed changes to the Standard Processes Manual (SPM), which is slated for recirculation ballot in early 2013. Changes to the SPM will promote informal consensus building and collaboration between standards and compliance staff; streamline the commenting and balloting process; reduce the requirement for periodic review; and incorporate a waiver provision to allow for modifications to the standards development process for good cause.

These changes will be supported by substantial organizational changes in the standards department that were implemented in the third quarter of 2012, the Board adoption of the Reliability Standards Development Plan 2013-2015 (which represents a bold revision of NERC's approach to managing the standards development workload), and enhanced guiding documents for the Standards Committee. Together, these efforts will enable NERC to improve the efficiency of its standards development process and transform the ERO's body of standards into a world-class body of results-based standards.



## Appendix A

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### Types of Standards Projects

For the purpose of analyzing results of its standards processes, NERC has identified four broad categories of standards projects.

The first category of projects is **Revisions to Existing Standards**. Revisions to existing standards are a significant and an ongoing part of NERC's standards development work, as NERC and industry work to address regulatory directives from FERC, modify standards to address changing technologies and operating conditions, and review standards in compliance with the five-year interval required to maintain ANSI accreditation. Between 2006 and 2010, the average time to complete revisions to existing standards was 30 months.

The second category is **New Standards**. There have been, and will continue to be, occasions where an entirely new standard or group of standards may be needed to address bulk power system reliability. The data collected from 2006 through 2010 show that these projects take longer, on average, than projects to revise existing standards. Between 2006 and 2010, the average time to complete projects to draft new standards was 42 months.

The third category is **Urgent Action/Expedited Projects**.<sup>8</sup> Urgent Action or Expedited Projects are shortened by reducing the time for certain process steps, or by allowing steps that would normally proceed serially to be conducted in parallel. By definition, these projects are expected to have a shorter development time, on average, than most standards projects. On average, the development time for Urgent Action and Expedited Projects from 2006 through 2010 was a little more than 7 months.

The final category is **Interpretations**. Entities that must comply with a reliability standard have the right to request a formal interpretation of a requirement included in a standard. Interpretation projects generally are narrower in scope than other standards projects, but like standards, interpretations are drafted by a drafting team and posted for industry review and ballot. From 2006 to 2010, NERC received a number of requests for interpretation that were absorbed into other projects because drafting teams could not prepare the interpretations without expanding the requirements of the approved standard. For those interpretation requests that were processed, the average time to complete interpretations and file them with regulatory authorities was about 10 months.

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<sup>8</sup> Prior to September 2010, the NERC *Reliability Standards Development Procedure* incorporated a process used for developing a standard more quickly than the normal standard development process, which was referred to as the Urgent Action Process. FERC's approval of the *Standard Processes Manual* in September 2010 replaced the Urgent Action process with the Expedited Standards Development Process.