NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

October 31, 2011

VIA ELECTRONIC FILING

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

Re: NERC Analysis of NERC Standard Process Results Third Quarter 2011 in Docket Nos. RR06-1-000, RR09-7-000

Dear Ms. Bose:

The North American Electric Reliability Corporation ("NERC") submits its Analysis of NERC Standards Process Results for the Third Quarter 2011 ("Ballot Results Filing"). This filing is submitted in response to the Federal Energy Regulatory Commission's ("FERC") January 18, 2007 Order[1] requiring NERC to closely monitor and report to FERC the voting results for NERC Reliability Standards each quarter for three years. In a subsequent order issued on September 16, 2010, the Commission renewed and expanded on its directive for an additional three years.[2]

The Ballot Results Filing is included as **Attachment A** to this filing. The Ballot Results Filing addresses ballot results during the July 1, 2011 to September 30, 2011 time frame and includes NERC's analysis of the voting results, including trends and patterns of stakeholder approval of NERC Reliability Standards. NERC requests that FERC accept this filing as compliant with the renewed 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/ Willie L. Phillips
Willie L. Phillips
Attorney for North American Electric Reliability Corporation

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

[1] *Order on Compliance Filing*, 118 FERC ¶ 61,030 at P 18 (2007).
[2] *Order on the Electric Reliability Organization's Three-Year Performance Assessment*, 132 FERC ¶ 61,217 at P 85 (September 16, 2010).

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Analysis of NERC Standards Process Results

Third Quarter 2011

October 31, 2011

RELIABILITY | ACCOUNTABILITY




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Introduction

Background: NERC's Revised 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.[1] The current *Standard Processes Manual* was approved by the Federal Energy Regulatory Commission ("FERC" or the "Commission") in September 2010,[2] amended August 2011,[3] and incorporates a number of process revisions intended to maintain the openness and inclusiveness of the standards development process, while improving efficiency and the quality of standards and interpretations. A summary of these revisions is included for convenience as Appendix A to this report.

To date, no project initiated under the revised *Standard Processes Manual* has been completed. All projects discussed in this report, and for which ballots were completed in the third quarter 2011, were initiated under the *Reliability Standards Development Procedure Version 7,* but will be completed under the new processes.

This Report

There are two purposes for producing this report. First, this report and future versions will provide NERC, its Board of Trustees, committees, and industry stakeholders information to support future decisions concerning improvements to the standards development process. Second, this report is responsive to directives from FERC directing NERC to monitor, analyze, and report on the results of its standards development processes.[4]

At the end of each calendar quarter, NERC will update 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 third quarter of 2011. The second section compares timelines for the projects balloted in the third quarter 2011 against baselines provided in the report filed on January 31, 2011, on the time to complete each phase of standards development. The comparison to the historical baselines is responsive to the

[1] NERC's Rules of Procedure are available at: http://www.nerc.com/page.php?cid=1|8|169.

[2] *Order Approving Petition and Directing Compliance Filing*, 132 FERC ¶ FERC 61,200 (September 3, 2010).

[3] *Letter Order Approving Standard Processes Compliance Filing* (August 25, 2011)

[4] *See Order on Compliance Filing,* 118 FERC ¶ 61,030 (January 18, 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.

Commission's directive to analyze the time required to complete each phase of the standards development process. NERC staff and the Standards Committee will use this analysis to monitor successes and to identify opportunities for improvements.

Analysis of Q3 2011 Standards Ballot Results

From July 1, 2011, through September 30, 2011, NERC conducted ballots for four separate Reliability Standards projects. Table 1 summarizes these ballot events. A complete record for each project is available on NERC's website on the Ballot Results webpage.[5]

Table 1

Project Type[6]	Project Number & Name	Q3 Ballot Events	Status
Revision	2006-02 - Assess Transmission Future Needs and Develop Transmission Plans	Recirculation Ballot of one Standard	Adopted by NERC BOT 8/2011
Revision	2006-06 - Reliability Coordination	Recirculation Ballots of three Standards and conforming changes to another Standard	Four standards adopted by NERC BOT 8/2011. (Work on three additional standards that were not balloted in Q3 2011 is ongoing.)
New	2007-09 - Generator Verification	Initial Ballot of two Standards	Ongoing
Revision	2007-17 - Protection System Maintenance and Testing	Initial Ballot of one Standard	Ongoing

During the third quarter 2011, two projects had balloted standards that were approved by their ballot pools and adopted by the NERC Board of Trustees on August 4, 2011. The first of these projects was Project 2006-02 - Assess Transmission Future Needs and Develop Transmission Plans. Although the ballot was for a single standard, the project involved the consolidation of requirements from six standards into a single standard. The recirculation ballot achieved a very high quorum of almost 95 percent, and a weighted segment approval of just over 75 percent. The NERC Board of Trustees adopted the standard and a petition for regulatory approval was submitted on October 19, 2011.

The second project was Project 2006-06 - Reliability Coordination. For Project 2006-06, three standards were approved by the ballot pool and adopted by the NERC Board of Trustees on

[5] The Ballot Results webpage is available at: https://standards.nerc.net/Ballots.aspx.

[6] Appendix A to this report provides a brief description of each type of standards project.

August 4, 2011. The project involves six standards, including three that were balloted in the third quarter. The standards drafting team ultimately determined that a recirculation ballot of these three standards was appropriate, based upon the consensus achieved in a previous ballot that was concluded in the second quarter 2011. These three standards were balloted individually, and each achieved high quorum and weighted ballot pool approvals of between 75 and 78 percent.

The NERC Board adopted the three standards, along with conforming changes to a fourth standard on August 4, 2011, and a petition for regulatory approval of the four standards is being prepared for filing in the fourth quarter 2011. The drafting team is continuing work on three other standards that are part of this project (this includes additional modifications to the standard being filed with a conforming change).

Two other projects that were balloted during the third quarter require additional work and are ongoing: Project 2007-09 - Generator Verification, and Project 2007-17 - Protection System Maintenance and Testing.

Project 2007-09 involves development of five standards, and, like Project 2006-06, the standards are at different points in development. Two of the standards in Project 2007-09 underwent separate initial ballots during the third quarter.[7] Both ballots achieved a very high quorum, but low weighted segment approvals of 46.53 percent and 18.23 percent. The other three standards were posted for comment concurrent with the two ballots, and the drafting team is considering comments received on all five standards to determine what revisions to the standards are needed.

Project 2007-17 is a project to merge four standards into a single standard. At the end of the second quarter, a recirculation ballot was conducted that narrowly failed to achieve the required two-thirds weighted segment approval. The drafting team for this project reevaluated the comments from the successive ballot and made additional revisions to clarify certain requirements, along with revisions to supporting technical references. In accordance with the *Standard Processes Manual*, the standard development process was reinitiated with the posting of a Standards Authorization Request ("SAR") and revised standard. Because the standard was not new to stakeholders, the Standards Committee waived the initial comment period and an initial ballot was conducted. The initial ballot achieved a quorum, but the standard again failed to achieve the required weighted segment approval by a few percentage points. Development will continue.

[7] Stakeholders have requested that individual standards be balloted separately for projects that involve multiple standards, and during the third quarter 2011 NERC began adopting this approach when possible.

Q3 2011 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.

In this section of this and future reports, NERC will compare the projects balloted each quarter against these baselines. These comparisons may highlight anomalies initially, but over time the comparison will help to identify trends in the time required for various phases of standards development.

During the third quarter of 2011, ballots were conducted for four standards projects. Three of the standards projects balloted in the third quarter are categorized as "revisions to existing standards" for the purposes of comparing to baselines. The remaining project is categorized as a project to develop "new standards" for this purpose. Chart 1 compares the development phases for each of the four revision projects in this quarter to the baseline. Chart 2 compares the development phases of the project to develop new standards to the baseline.

A discussion of the development phases for these projects is included below.

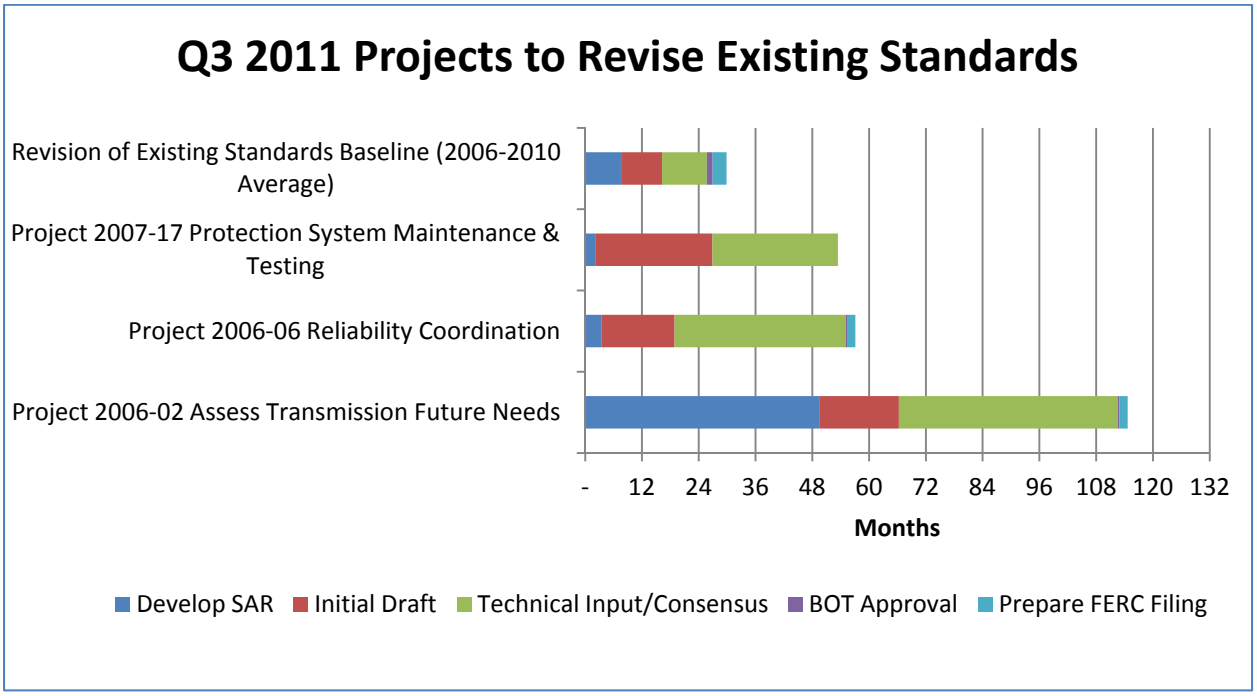

Chart 1

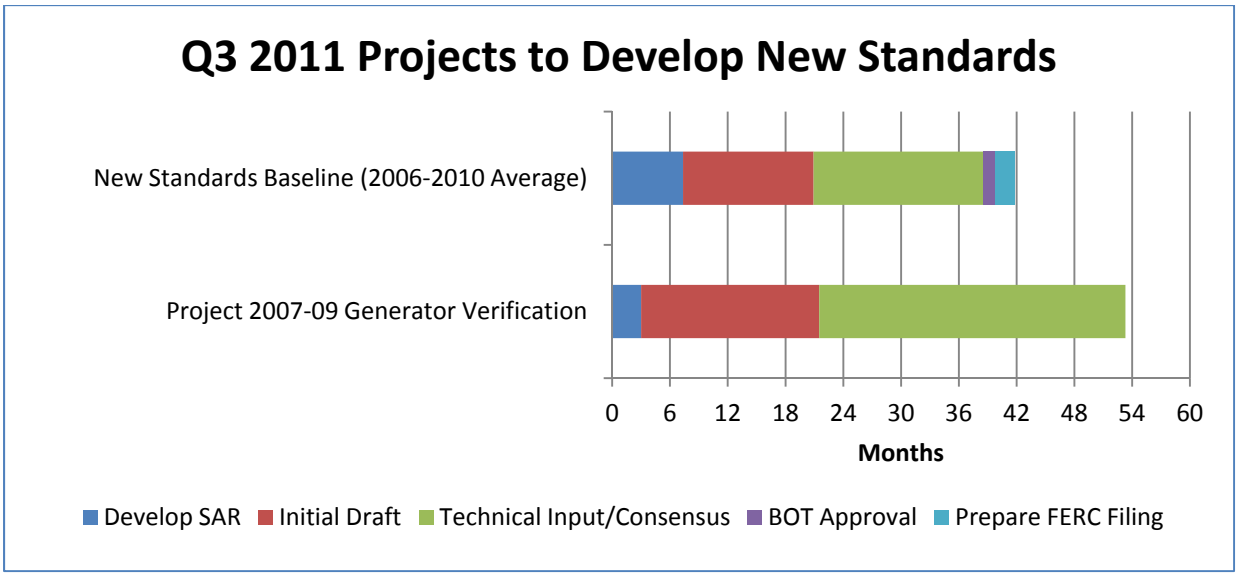

Chart 2

No ballots of "interpretations" or "expedited projects" were conducted during the third quarter 2011.

SAR Development Phase. For all projects balloted in the third quarter of 2011 with the exception of Project 2006-02,[8] the SAR was finalized quickly after being posted for industry review. One project, 2007-17, required that the SAR be posted a second time when the project was reinitiated after a recirculation ballot failed to achieve industry approval. No additional time was included in the SAR development phase for the purpose of this analysis because the drafting team did not make any substantive revisions to the original SAR. From 2006 to 2010, SAR development times averaged eight months for a project to revise one or more existing standards. The SAR development period for projects balloted during the third quarter of 2011 averaged less than three months.

Initial Draft Phase. All three projects balloted in the third quarter 2011 required a longer period of time than the baseline for the comparable type of project, with the initial draft phases of the three projects requiring between 15 and 24 months to complete. For comparison, the 2006-2010 average duration of this phase of standard development was between eight and nine months for projects to revise standards, and almost 14 months for projects to develop new standards. One factor that may account for the difference between the projects being balloted in the third quarter and the 2006-2010 baseline is that many of the projects included in the baseline included a single standard, whereas all of the projects balloted in Q3 2011 include multiple standards. In addition, Project 2006-06 involves a number of issues that require coordination with other drafting teams to ensure a cohesive approach to requirements involving real-time operations and communications.

[8] As discussed in the *Analysis of NERC Standard Process Results Second Quarter 2011,* filed July 29, 2011, the SAR development period for Project 2006-02 was more than 49 months, in part because SAR development for Project 2006-02 was placed on 'hold' for almost two years before the SAR was finalized while waiting for completion of Version 0 standards.

Technical Input Phase. Technical input from the industry is received 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 responses to the comments received. The technical input phase is essentially a highly-organized dialogue between the drafting team and other industry stakeholders.

For the three revision projects balloted during the third quarter of 2011, this phase has taken, on average, 36 months and is ongoing for two of the three projects. For Project 2007-09, in which the two standards balloted are new standards, the technical input phase has taken 32 months to date, and is ongoing. For all projects revising existing standards from 2006 to 2010, the average duration of the technical input phase was nine and a half months, and for projects to develop new standards the average duration of this phase was approximately 18 months. As with the initial draft phase, conclusions about the comparison between this quarter's projects and the baseline must consider that the baseline averages developed for 2006 to 2011 involved many projects to develop a single standard while all three of the projects this quarter are complex projects involving multiple standards and coordination with other projects.[9]

Board of Trustee Adoption. The period of time between ballot pool approval of a standard and Board of Trustee adoption of the standard varies depending on the number of other items that require action by the board. (The board has a fixed schedule of face-to-face meetings, and supplements its face-to-face meetings, as needed, to ensure prompt action when necessary to meet ERO obligations.) In the third quarter of 2011, five standards from two projects (one from Project 2006-02 Assess Transmission Future Needs and Develop Transmission Plans, and four from Project 2006-06 Reliability Coordination) were presented to the Board of Trustees for adoption. All of the standards were presented to the Board for adoption within two weeks of ballot pool approval.

Filing with Regulatory Authorities. During the third quarter of 2011, NERC filed a petition for approval of two interpretations of the same standard, EOP-004. These interpretations were approved by the Board of Trustees in November 2010. Once the Board of Trustees approves a standards project, NERC staff routinely prepares a draft filing, which is then circulated internally for comment. If substantive edits are required in response to comments received, then additional drafts may be circulated. After a consensus is reached on the draft, NERC finalizes the filing and compiles supporting exhibits for submittal to FERC.[10]

[9] NERC has recognized this constraint and when the baselines are updated with 2011 data will provide additional analysis to account for the differences between projects.

[10] NERC also files each new or revised standard with each applicable Canadian governmental authority.

Conclusion

NERC and the Standards Committee continue to look for opportunities to improve the efficiency and effectiveness of the standards process. One possible improvement that was tested during the third quarter 2011 was the practice of balloting each standard in a project individually. Some drafting teams have expressed concerns that this may result in a less efficient process if standards approved by the ballot pool must ultimately be changed after approval in order to conform to changes made to other standards that are part of the same project. It will be important to monitor each project to determine when separate balloting may provide additional information to assist the drafting team in developing a technically sound standard and reaching consensus more quickly. NERC continues to recognize challenges in communicating changes made by drafting teams between a recirculation ballot and the previous ballot, and has undertaken steps to improve active stakeholder participation in recirculation ballots by improving communications to stakeholders to identify changes made in response to stakeholder input before standards are posted for recirculation ballots.

Appendix A

Summary of Process Revisions in NERC Standards Processes Manual

NERC's *Standards Processes Manual* was developed to replace *Reliability Standards Development Procedure Version 7 (RSDP7)* as Appendix 3A of the NERC Rules of Procedure. The *Standard Processes Manual* was approved by FERC in September 2010.[11]

One of the significant modifications in the new *Standard Processes Manual* is the method used to achieve consensus – through parallel comment and ballot periods, which are conducted early in the process and continue until consensus is achieved. This change appears to be increasing the quality and quantity of feedback that the standards drafting teams are receiving on proposed standards. Because drafting teams are encouraged to make significant changes to the standards between successive ballots without a pre-ballot review period, this modification gives drafting teams the flexibility to revise the standards to take account of the comments received and immediately re-ballot without the separate, successive formal comment and pre-ballot review periods that were required in the *RSDP7*.

This added efficiency means drafting teams begin ballot periods earlier in the development process. While initial ballot results may receive lower approval ratings in the initial stages, as approval increases, the successive ballot process provides a clear indication of the move toward industry consensus.

Just as in the *RSDP7*, an entity or individual that desires to vote on proposed reliability standards must be a member of the registered ballot body. The registered ballot body includes all entities or individuals that qualify for one of ten stakeholder segments and have registered with NERC as potential voting participants. Each member of the registered ballot body is eligible to participate in the voting process and ballot pool for each standard action. The ten stakeholder segments are:

- Transmission Owners
- Regional Transmission Organizations and Independent System Operators
- Load-Serving Entities
- Transmission Dependent Utilities
- Electric Generators
- Electricity Brokers, Aggregators, and Marketers
- Large Electricity End Users
- Small Electricity Users
- Federal, State, and Provincial Regulatory or other Government Entities
- Regional Reliability Organizations and Regional Entities

[11] *Order Approving Petition and Directing Compliance Filing*, 132 FERC ¶ FERC 61,200 (September 3, 2010).

Each standard ballot action has its own ballot pool, populated by interested members of the registered ballot body, including those with specific technical expertise of the subject matter. The individuals that join a ballot pool respond to a pre-ballot e-mail announcement associated with each reliability standard ballot action. The ballot pool size varies, and is based on the standard and the topic. The ballot pool votes to approve or reject each standard action. Specifically, the ballot pool votes determine: (1) the need for and technical merits of a proposed standard action; and (2) that appropriate consideration was given to views and objections received during the development process.

The reliability standards development process may include three types of ballots: an initial ballot, a successive ballot, and a recirculation ballot. An initial ballot is conducted during the last 10 days of a 45-day comment period; successive ballots are conducted during the last 10 days of a 30-day comment period. Following an initial or successive ballot, the drafting team is obligated to respond to each stakeholder comment. The drafting team must consider the issues raised in stakeholder comments to determine whether revisions to the standard and its associated implementation plan should be made.

If the comments submitted during the initial comment period and ballot indicate a need for significant changes, then the drafting team will produce a new draft standard, even if the weighted segment approval is 66.66% or greater. When a drafting team makes significant revisions to the standard, the next ballot held is a successive ballot conducted during the last 10 days of a parallel 30-day comment period. Votes cast by the ballot pool in the initial ballot are not counted in a successive ballot. Each ballot pool member must cast a new vote.

If needed, the *Standard Processes Manual* allows for multiple, successive ballots to obtain the two-thirds majority on a proposed standard. Once the comments from a successive ballot are addressed by the drafting team and there is no need for significant changes to the standard, the standard proceeds to a recirculation ballot.

A recirculation ballot does not have a comment period, and votes cast in the most recent successive ballot are carried forward. If a member of the ballot pool chooses to vote in the recirculation ballot, the vote cast by that member in the successive ballot is updated.

Approval of a standard action requires that both:

- A quorum is established. This requirement is met when at least 75% of the members of the ballot pool for the standard action submit a response with an affirmative vote, a negative vote, or an abstention; and
- A two-thirds majority of the weighted segment votes cast are affirmative. The number of votes cast is the sum of affirmative and negative votes, excluding abstentions and non-responses.

The following process is used to determine whether there are sufficient affirmative votes.

- The number of affirmative votes cast in each segment is divided by the sum of affirmative and negative votes cast to determine the fractional affirmative vote for

each segment. Abstentions and non-responses are not counted for the purposes of determining the fractional affirmative vote for a segment.

- If there are less than ten entities that vote in a segment, the vote weight of that segment is proportionally reduced. Each voter within that segment voting affirmative or negative receives a weight of 10% of the segment vote. For segments with ten or more voters, the regular voting procedures are followed.
- The sum of the fractional affirmative votes from all segments divided by the number of segments voting is used to determine if a two-thirds majority affirmative vote has been achieved. (A segment is considered as "voting" if any member of the segment in the ballot pool casts either an affirmative or a negative vote.) [12]
- A standard is approved if the sum of fractional affirmative votes from all segments divided by the number of voting segments is equal to or greater than two thirds.

On March 17, 2011[13] the Commission approved a modification to NERC's Rules of Procedure, Rule 321, that was developed to respond to FERC's March 18, 2010 Order directing NERC to propose modifications to NERC's Rules of Procedure was approved by the Commission.[14] Rule 321 lays out specific processes to be used if stakeholders are unable to achieve consensus through the processes in the Standards Processes Manual to present the NERC Board of Trustees with a standard that is responsive to a specific Commission directive.

[12] When less than ten entities vote in a segment, the total weight for that segment is determined as one tenth per entity voting.

[13] *See Order Directing NERC to Propose Modification of Electric Reliability Organization Rules of Procedure,* 130 FERC ¶61,203 (March 18, 2010). *See also,* Compliance Filing of the North American Electric Reliability Corporation in Response to March 18, 2010 Commission Order Directing Revisions to Standards Development Procedure, filed in Docket No. RR08-6-000 (December 23, 2010).

[14] *Order on Compliance Filing,* 134 FERC ¶ FERC 61,216 (March 17, 2011).

Appendix B

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**.[15] 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.

[15] 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.

Appendix C

Phases in Standard Projects

NERC has identified five phases in the development of a Reliability Standard. Table 2 identifies those phases.

Table 2

Phases in NERC Reliability Standards Development Projects	
Phase	**Description**
1. SAR Development	from initial draft SAR to SC acceptance of a SAR for posting, including industry ballot of SAR if required
2. Initial Draft Development	from acceptance of SAR to posting of initial draft
3. Industry Technical Input/Consensus Building	from posting of initial draft(s) through ballot pool approval of a recirculation ballot
4. Board of Trustee (BOT) Approval	from ballot pool approval to BOT approval
5. Filing with Regulatory Authorities	from BOT approval to filing