

Agenda

Standards Oversight and Technology Committee

November 6, 2013 | 8:45-10:45 a.m. Eastern

The Westin Buckhead Atlanta
3391 Peachtree Road, N.E.
Atlanta, GA 30326
Phone: 800-253-1397

Introductions and Chair's Remarks

NERC Antitrust Compliance Guidelines

Agenda

1. **Minutes* — Approve**
 - a. August 14, 2013 Meeting
2. **Status on Operating Personnel Communication Protocols — COM-003-1* — Review**
3. **Review of Standards Process Effectiveness* (Brian Murphy, SC) — Review**
 - a. Status of Appeal regarding simultaneous post of a draft SAR and standard with a ballot
4. **Reliability Standards Quarterly Status Report* — Review**
 - a. Priorities/adjustments to work plan using the Independent Experts Review Panel Report
5. **Information Technology Update/SOTC Subgroup Report — Informational**

*Background materials included.

Antitrust Compliance Guidelines

I. General

It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or that might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition.

It is the responsibility of every NERC participant and employee who may in any way affect NERC's compliance with the antitrust laws to carry out this commitment.

Antitrust laws are complex and subject to court interpretation that can vary over time and from one court to another. The purpose of these guidelines is to alert NERC participants and employees to potential antitrust problems and to set forth policies to be followed with respect to activities that may involve antitrust considerations. In some instances, the NERC policy contained in these guidelines is stricter than the applicable antitrust laws. Any NERC participant or employee who is uncertain about the legal ramifications of a particular course of conduct or who has doubts or concerns about whether NERC's antitrust compliance policy is implicated in any situation should consult NERC's General Counsel immediately.

II. Prohibited Activities

Participants in NERC activities (including those of its committees and subgroups) should refrain from the following when acting in their capacity as participants in NERC activities (e.g., at NERC meetings, conference calls and in informal discussions):

- Discussions involving pricing information, especially margin (profit) and internal cost information and participants' expectations as to their future prices or internal costs.
- Discussions of a participant's marketing strategies.
- Discussions regarding how customers and geographical areas are to be divided among competitors.
- Discussions concerning the exclusion of competitors from markets.
- Discussions concerning boycotting or group refusals to deal with competitors, vendors or suppliers.

- Any other matters that do not clearly fall within these guidelines should be reviewed with NERC's General Counsel before being discussed.

III. Activities That Are Permitted

From time to time decisions or actions of NERC (including those of its committees and subgroups) may have a negative impact on particular entities and thus in that sense adversely impact competition. Decisions and actions by NERC (including its committees and subgroups) should only be undertaken for the purpose of promoting and maintaining the reliability and adequacy of the bulk power system. If you do not have a legitimate purpose consistent with this objective for discussing a matter, please refrain from discussing the matter during NERC meetings and in other NERC-related communications.

You should also ensure that NERC procedures, including those set forth in NERC's Certificate of Incorporation, Bylaws, and Rules of Procedure are followed in conducting NERC business.

In addition, all discussions in NERC meetings and other NERC-related communications should be within the scope of the mandate for or assignment to the particular NERC committee or subgroup, as well as within the scope of the published agenda for the meeting.

No decisions should be made nor any actions taken in NERC activities for the purpose of giving an industry participant or group of participants a competitive advantage over other participants. In particular, decisions with respect to setting, revising, or assessing compliance with NERC reliability standards should not be influenced by anti-competitive motivations.

Subject to the foregoing restrictions, participants in NERC activities may discuss:

- Reliability matters relating to the bulk power system, including operation and planning matters such as establishing or revising reliability standards, special operating procedures, operating transfer capabilities, and plans for new facilities.
- Matters relating to the impact of reliability standards for the bulk power system on electricity markets, and the impact of electricity market operations on the reliability of the bulk power system.
- Proposed filings or other communications with state or federal regulatory authorities or other governmental entities.

Matters relating to the internal governance, management and operation of NERC, such as nominations for vacant committee positions, budgeting and assessments, and employment matters; and procedural matters such as planning and scheduling meetings.

Draft Minutes Standards Oversight and Technology Committee

August 14, 2013 | 11:15 a.m. local time

Chair Ken Peterson convened a duly noticed open meeting of the Standards Oversight and Technology Committee (the Committee) of the North American Electric Reliability Corporation on August 14, 2013 at 11:15 a.m. local time, and a quorum was declared present. The agenda is attached as **Exhibit A**.

Present at the meeting were: All Committee members, being Ken Peterson, Chair, Paul Barber, Dave Goulding, Bruce Scherr, Doug Jaeger, and Fred Gorbet; Board members Jan Schori, Janice Case, Roy Thilly, Bob Clarke, and Gerry Cauley; NERC staff members Michael Walker, Mark Rossi, Charlie Berardesco, Holly Hawkins, Mark Lauby, Valerie Agnew, Tom Burgess, and Tina Buzzard; and Guy Zito, Assistant Vice President, Standards, NPCC.

NERC Antitrust Compliance Guidelines

Mr. Peterson directed the participants' attention to the NERC Antitrust Compliance Guidelines.

Minutes

The Committee approved the July 15 and May 8, 2013 meeting minutes as presented at the meeting.

Reliability Standards Quarterly Status Report

Mr. Lauby provided an overview of the progress on current FERC directives and Paragraph 81, stating that, to date, 133 standards directives are left to be addressed. Of those, 92 are projected to be addressed in 2013, and the remaining directives are projected to be addressed in the first half of 2014. He also reviewed the Notice of Proposed Rulemaking (NOPR) FERC issued in June proposing to approve the retirement of all of the requirements that were proposed for retirement under Phase 1 of the Paragraph 81 project. Mr. Lauby also noted that the NOPR proposes to retire 41 directives that are not necessary for reliability, 22 of which apply to Standards and will further reduce the 133 outstanding standards directives.

Introduction of Policy Issues

Mr. Lauby presented on two policy items—the Definition of Bulk Electric System (BES), Phase 2 and the Geomagnetic Disturbance (GMD) Reference Storm. With respect to BES, Mr. Lauby reviewed the June 6, 2013 FERC order which provides a one-year extension of the effective date of BES to provide time for a filing of a revised definition that addresses Order No. 773 directives, as well as the alternative approach to removing the 100 kV minimum to address stakeholder concerns raised at the May meetings.

Mr. Lauby reviewed the Order No.779 on GMD stating that through policy input from industry and the standards development process, benchmark GMD events will be identified and once determined, the proposed benchmark GMD event will become a basis for a Special Reliability Assessment being developed by the GMD Task Force and NERC staff to be conducted in early 2014. This assessment will provide useful information to inform the development and implementation of Stage 2 Standards.

Update of Key Projects

Standards Independent Experts Review Project-Final Report

Ms. Agnew provided an overview of the final report of the Standards Independent Experts Review Panel highlighting the Panel's key findings and recommendations to include near- and long-term recommendations. Active discussion ensued with stakeholders and the Committee, during which it was requested that NERC Management evaluate how the report will be utilized in the standards development process and update stakeholders on progress.

Cost-Effective Analysis Process

Messrs. Lauby, Burgess, and Zito provided an overview of the Cost-Effective Analysis Process (CEAP), explaining that two standard projects have been selected to pilot the second phase of CEAP and that a review team comprised of the Standards Committee and its Process Subcommittee members, along with representatives from industry and NERC staff, will complete a CEAP report for each project for review by the Standards Committee. Mr. Lauby also noted that both the Reliability Issues Steering Committee (RISC) and NERC's Reliability Assessment and Performance Analysis group are currently considering methods to introduce cost analysis in their respective areas. Mr. Zito reviewed his meeting with FERC staff stating they are supportive of the process.

Operating Personnel Communication Protocols — COM-003-1

Ms. Hawkins provided an update on the status of the COM-003-1 standard, stating the standard failed to receive approval by a two-thirds majority of the ballot body for the fifth time. She reviewed the three main themes identified through industry comments: 1) concern with compliance risks; 2) disagreement that COM-003 standards are needed; and 3) the desire to have COM-002-3 and COM-003-1 consolidated. At the conclusion of Ms. Hawkins' report, Mr. Peterson directed discussion on key topic areas: how should the Board of Trustees respond, whether a reliability gap still exists if COM-003-1 is not approved, and what ways, if any, could the standard be approved. At the conclusion of the active discussion, Mr. Gorbet stated that he believed additional information was needed before the Board could make a determination as to how to move forward, and recommended the RISC, the Independent Experts Review Panel, and NERC management respond to five questions and submit those responses to the Board and for industry comment. He proposed that the Board consider all such input and determine how to proceed at its November meeting, including whether or not to invoke one of the processes set forth in Rules of Procedure Section 321. The five questions proposed are:

1. Proposed COM-002-3 Reliability Standard provides a standard that addresses communication protocols in an emergency. Are there circumstances that are not an emergency (as defined in COM-002-3) that can lead to reliability risks if not appropriately addressed by a standard? If so, what are these circumstances and how important is it that there be a standard to address them?
2. Does the latest draft of the COM-003-1 Reliability Standard address such circumstances appropriately? Is it a "quality standard" on the basis of the criteria that are being used to assess existing and future standards by the Independent Experts Panel?

3. Are there changes you would recommend to improve the current draft of the COM-003-1 Reliability Standard? Describe how the enhancements would address any gaps in bulk-power system reliability.
4. Should the proposed COM-002-3 Reliability Standard approved by the Board be rescinded and a new standard developed that addresses communications during both emergency and non-emergency conditions? If so, what key issues would it address, including an appropriate definition of “non-emergency conditions”?
5. Do you have any additional input regarding the development of the COM-003-1 Reliability Standard for the Board to consider in its deliberations on next steps?

The Committee members agreed with this approach and requested that Mr. Berardesco draft a resolution for review and approval at the Board meeting the next day.

Adjournment

There being no further business, upon motion duly made and seconded, the meeting was adjourned at 12:50 p.m. local time.

Submitted by,



Charles A. Berardesco
Secretary

Operating Personnel Communication Protocols — COM-003-1

Action

NERC management is requesting that the Standards Oversight and Technology Committee (SOTC) consider updates to the SOTC recommendation from the Standards Committee and NERC management at its meeting of November 6, 2013.

Summary

The Federal Energy Regulatory Commission's (FERC's) Order No. 693 directed that NERC develop a Reliability Standard that requires tightened communication protocols, especially for communications during alerts and emergencies. The same order also recommended that enhanced communication protocols should be applied in "normal" circumstances.

The Board, at its February 9, 2012 meeting, approved a proposed interpretation of the COM-002-2 Reliability Standard that the word "directive," as used in COM-002-2, pertains solely to emergency operations. At the same meeting, the Board approved a resolution directing the Standards Committee (SC) to complete development activities on the proposed COM-003 Reliability Standard, which was intended to address tightened communication protocols for non-emergency operations, on a high priority basis.

The proposed COM-002-3 Reliability Standard addresses tightened communication protocols for alert and emergency operating conditions, and was approved by the Board on November 7, 2012. [[COM-002-3](#)]

The draft COM-003-1 Reliability Standard has been balloted six times and has received the support of a majority of the ballot body on four successive ballots, but failed to achieve the approval of two-thirds of the ballot body.

The Board, at its August 15, 2013 meeting, agreed to consider, at its November 2013 meeting, how best to act on: 1) the disposition of the approved interpretation of the approved COM-002-2 Reliability Standard, 2) the Board-approved COM-002-3 Reliability Standard, and 3) the draft COM-003-1 Reliability Standard, including whether to exercise its authority under Section 321 of the NERC Rules of Procedure. The Board directed the Reliability Issues Steering Committee (RISC), the Independent Expert Review Panel (IERP), and NERC management to respond to specific questions related to the draft COM-003-1 Reliability Standard. The Board also requested the Operating Committee to review the questions and responses, and provide its input to the Board.

Responses to the questions from RISC, NERC management, and IERP were submitted on September 6, 2013, and posted on the NERC website. Input received from the Operating Committee is included as **Attachment A**. A summary of the responses received, including a summary of the input from the Operating Committee, was included as an attachment to the October 9, 2013 Policy Input Letter.

The SOTC held a closed meeting on September 30, at which it considered the responses to the questions posed by the Board, as noted above, and considered legal advice provided by NERC's general counsel relating to issues relevant to the Reliability Standards being considered and Section 321 of the NERC Rules of Procedure, and discussed possible recommendations it might make for Board action. As a result of that discussion, the SOTC recommended that the Board direct the SC and the relevant standard drafting team to develop a combined COM-002 and COM-003 Reliability Standard that should address specific elements which are described in detail in the SOTC's September 30 recommendation. The SOTC's September 30 recommendation is included as **Attachment B**.

In addition, the SOTC considered commentary on the uncertainty around the potential compliance and enforcement approaches with respect to any new communications standards. The SOTC's recommendation includes specific directions related to both the language of a new combined Reliability Standard as well as management action with respect to proposed compliance and enforcement approaches.

Further to the SOTC's recommendation, the SOTC will consider updates from the Standards Committee and NERC management at its meeting of November 6, 2013. The Board will consider the SOTC recommendation and these updates at its meeting of November 7, 2013 and will determine what actions may be appropriate.

Pertinent FERC Order No. 693 directives

Paragraph 512

The Commission finds that, during both normal and emergency operations, it is essential that the transmission operator, balancing authority and reliability coordinator have communications with distribution providers...we adopt our proposal to require the ERO to modify COM-002-2 to apply to distribution providers through its Reliability Standards development process.

Paragraph 531

We adopt our proposal to require the ERO to establish tightened communication protocols, especially for communications during alerts and emergencies, either as part of COM-002-2 or as a new Reliability Standard. We note that the ERO's response to the Staff Preliminary Assessment supports the need to develop additional Reliability Standards addressing consistent communications protocols among personnel responsible for the reliability of the Bulk-Power System.

Paragraph 532

While we agree with EEI that EOP-001-0, Requirement R4.1 requires communications protocols to be used during emergencies, we believe, and the ERO agrees, that the communications protocols need to be tightened to ensure Reliable Operation of the Bulk-Power System. We also believe an integral component in tightening the protocols is to establish communication uniformity as much as practical on a continent-wide basis. This will eliminate possible ambiguities in communications during normal, alert and emergency conditions. This is important because the Bulk-Power System is so tightly interconnected that system impacts often cross several operating entities' areas.

Paragraph 535

Accordingly, we direct the ERO to either modify COM-002-2 or develop a new Reliability Standard that requires tightened communications protocols, especially for communications during alerts and emergencies.

Paragraph 540

While the Commission identified concerns regarding COM-002-2, the proposed reliability standard serves an important purpose by requiring users, owners and operators to implement the necessary communications and coordination among entities. Accordingly, the Commission approves Reliability Standard COM-002-2 as mandatory and enforceable. In addition, pursuant to section 215(d)(5) of the FPA and § 39.5(f) of our regulations, the Commission directs the ERO to develop a modification to COM-002-2 through the Reliability Standards development process that: (1) expands the applicability to include distribution providers as applicable entities; (2) includes a new Requirement for the reliability coordinator to assess and approve actions that have impacts beyond the area view of a transmission operator or balancing authority and (3) requires tightened communications protocols, especially for communications during alerts and emergencies. Alternatively, with respect to this final issue, the ERO may develop a new Reliability Standard that responds to Blackout Report Recommendation No. 26 in the manner described above. Finally, we direct the ERO to include APPA's suggestions to complete the Measures and Levels of Non-Compliance in its modification of COM-002-2 through the Reliability Standards development process. (emphasis added)

Standard Development Process Update

On October 17, 2013, the Standards Committee approved a waiver that would give the COM-003 standard drafting team the ability to approve the development of a revised standard on an expedited timeline and develop a draft combined standard based on the SOTC's September 30 recommendations. The waiver allows the standard drafting team to post the combined standard for a 15-calendar day comment period and concurrent 10-day ballot period. If the combined standard passes, the waiver directs the standard drafting team to post the combined standard for a 5-calendar day final ballot period. If the combined standard does not pass, the standard drafting team is directed not to post the revised combined standard for a final ballot.

Given the Standards Committee waiver, the COM-003 standard drafting team developed a combined standard, which is referred to as the draft COM-002-4 standard, that was posted for a 15-calendar day calendar comment period and concurrent 10-day ballot period on October 21, 2013. The draft COM-002-4 standard is available at the following link: [COM-002-4 Project Page](#). The COM-002-4 ballot will close on November 4, 2013, and NERC management will provide an update on the ballot results to the SOTC at the November 6, 2013 meeting and to the Board at the November 7, 2013 meeting.

Additional Information

The project history, responses from RISC, NERC Management and the IERP, and the project files are posted at: [Operational Communication Protocol Project 2007-02](#).

September 23, 2013

Mr. Fred Gorbet
Chairman
NERC Board of Trustees

RE: Operating Committee Response to COM-003-1 Reliability Standard

Dear Mr. Gorbet:

At the August 15, 2013 NERC Board of Trustees (Board) meeting, the NERC Operating Committee (OC) was directed to review the responses from the Reliability Issues Steering Committee (RISC), the Independent Experts Review Panel and NERC management to five questions pertaining to the draft COM-003-1 Reliability Standard. These were included in the NERC OC meeting material for the committee to review in preparation for the meeting discussion. Armed with this information, the OC reviewed and discussed the five questions at their September 17-18, 2013 meeting. Following are the NERC OC's perspectives and thoughts on the five questions answered.

Clear communication is important for the reliable operation of the system in both normal and emergency conditions. As such, the OC believes that incentives are currently in place and three-part communications are currently being used for many operational communications. The need for clear communications is not something new, it has always been vital for safe operations to protect utility personnel, the public, and assets, as well as for ensuring reliable operations. In recognition of this need, the OC created Reliability Guideline: System Operator Verbal Communications - Current Industry Practices. The purpose of this reliability guideline is "...to document and share current verbal BES communications practices and procedures from across the industry that have been found to enhance the effectiveness of system operator communications programs. These (practices and procedures) are not mapped to existing or future mandatory requirements, but rather are intended to show the breadth of industry practices concerning verbal communications."

As noted in the RISC's comments, there is little evidence that non-emergency communications represent a reliability gap. NERC's Events Analysis process has not identified non-emergency operational communications as a concern. In addition, neither the February 2011 Southwest Cold Weather Event nor the September 2011 Arizona-Southern California Blackout reports identified non-emergency operational communications as a concern. Hence, the NERC OC recommends that a standard is not needed for non-emergency operational communications. However, if a standard is developed for non-emergency operational communications, the NERC OC has the following comments:

The existing COM-003-1 Standard Drafting Team (SDT) has been through several iterations without success. A fresh start is needed with a new team. This team should have substantial operational experience, preferably extensive on-shift experience.

A Reliability Assurance Initiative (RAI) or non-zero tolerance approach is recommended for a communication standard. This could set a benchmark on how Reliability Standards can be focused on improving future performance through internal controls that include program development, training, monitoring, evaluation and correction. Such action would also recognize that many operational communications are problem identification and solution finding discussions that should not be subjected to a three part communications process.

In addition, consideration should be given to limiting the additional compliance and administrative burdens for NERC, the Regional Entities, and the industry created by a new standard, since there is little evidence that non-emergency communication represents a significant risk.

The OC's responses to the five questions follow.

Question 1: Proposed COM-002-3 Reliability Standard provides a standard that addresses communication protocols in an emergency. Are there circumstances that are not an emergency (as defined in COM-002-3) that can lead to reliability risks if not appropriately addressed by a standard? If so, what are these circumstances and how important is it that there be a standard to address them?

OC Response

- The NERC OC agrees non-emergency communications in real-time operations can lead to reliability risks. However, the OC does not believe that this alone creates a need for a separate standard to address communications during normal operations. The electric system is designed and operated to limit the effect of a (n-1) contingency. The OC also believes incentives are currently in place today, such as personnel and public safety and human error prevention, to ensure proper communications in normal operations and that additional standards are not required.
- If the Board chooses to move forward with the standard development, the OC could support a single standard that addresses operational communication that provides continuity across all operational states. We would suggest starting with a clean slate to develop one standard replacing COM-002 and COM-003. See Q5.

Question 2: Does the latest draft of the COM-003-1 Reliability Standard address such circumstances appropriately? Is it a "quality standard" on the basis of the criteria that are being used to assess existing and future standards by the Independent Experts Review Panel?

OC Response

- The OC does not consider the draft COM-003-1 as a quality standard.
- The OC could support a single communications standard that addresses operational communications under all operational states as outlined in the OC responses below.

Question 3: Are there changes you would recommend to improve the current draft of the COM-003-1 Reliability Standard? Describe how the enhancements would address any gaps in Bulk-Power System reliability.

OC Response

- This response is based on the OC's response to Question 1.

The OC could support a single communications standard that addresses operational communications under all operational states. Our recommendation to improve the standard would be to modify the standard for entities to self monitor, evaluate, and correct communication deficiencies with a goal of future performance improvement, as opposed to a zero defect type of standard. Under no circumstances do we believe that a zero defect approach is constructive or warranted in the context of operational communications.

Question 4: Should the proposed COM-002-3 Reliability Standard approved by the Board be rescinded and a new standard developed that addresses communications during both emergency and non-emergency conditions? If so, what key issues would it address, including an appropriate definition of "non-emergency conditions"?

OC Response

- This response is based on the OC's response to Question 1.

The OC believes that all Board action with regard to proposed COM-002-3 be placed on hold and expedite moving forward with a new COM standard.

The OC could support a single communications standard that addresses operational communications under all operating states as outlined in the OC responses to questions 3 and 5.

Question 5: Do you have any additional input regarding the development of the COM-003-1 Reliability Standard for the Board to consider in its deliberations on next steps?

OC Response

- If the Board determines it is necessary to move forward with a standard, the OC recommends taking a clean slate approach (i.e., a new SAR and new SDT) to develop one standard addressing operational communications. The standard should focus on communication categories where three-part communications can be applied in an effective and practical way such as topology changes, and not including less practical categories such as "all calls," routine adjustments such as resource dispatch instructions within the normal operational range of the resource, and leaving space for problem solving discussions. The standard should not be zero tolerance based. The standard should focus on self monitoring, evaluating, and correcting any communication deficiencies.

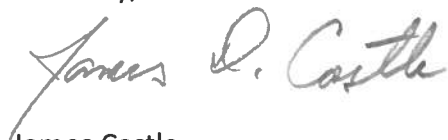
Other Considerations

- Compliance (Move away from zero tolerance and get to a programmatic and results based standard – e.g., FAC-003-3)
- Training (How will a new standard impact training across the industry?)
- Timing (Consolidating COM-002 and 003 into a single standard takes more time but results in a better product than two separate standards.)
- Refrain from creating new glossary terms, such as “operating instructions.”

In summary, the OC believes that a standard is not needed for non-emergency operational communications. However, if the Board chooses to move forward with a standard development, the OC could support a single standard that addresses operational communication that provides continuity across all operational states.

The Operating Committee thanks the Board of Trustees for allowing us the opportunity to provide feedback regarding the draft COM-003-1 Reliability Standard.

Sincerely,



James Castle
Operating Committee Chair

cc: Board of Trustees
Operating Committee
Mark Lauby
Mike Moon
Holly Hawkins

NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION
Recommendation of the Standards Oversight and Technology Committee to the NERC
Board of Trustees

Standards Oversight and Technology Committee Meeting
September 30, 2013

RESOLVED, that the Standards Oversight and Technology Committee (“SOTC”) hereby recommends that the Board direct the Standards Committee and relevant standard drafting team to develop a combined COM-002 and COM-003 standard that addresses, at a minimum, the following:

- Draws on the Operating Committee Guideline for good communication practice;
- Requires training, periodic testing, and remedial action where testing showed that a protocol was not followed;
- Requires the use of three-part communications only for: i) emergency and alert communications; and ii) non-emergency communications that change or preserve the state, status, output, or input of the Bulk Electric System;
- Includes a set of protocols to be used by all entities;
- Requires training of system operators on the communications protocols and demonstrates evidence of that training; and
- Includes a process to review communications with system operators and provide feedback on adherence to the communication protocols and identify any necessary changes to the protocols.

FURTHER RESOLVED, that the standard drafting team should, in connection with developing a draft combined standard, consider the following compliance/enforcement approach:

- Entities should be accountable for incorrect use of communication protocols in connection with alerts and emergency operations, without exception.
- For all other use of communication protocols in connection with non-emergency conditions, the standard should provide that, in the case of non-emergency communications that change or preserve the state, status, output, or input of the Bulk Electric System, any failure found during an audit or an events analysis investigation would be evaluated by the ERO enterprise using enforcement discretion to determine whether or not the circumstances merit treating the failure as a violation.

FURTHER RESOLVED, that the Chair of the SOTC should communicate the substance of the resolution to the Chair of the Standards Committee in a timely manner.

FURTHER RESOLVED, that NERC management is directed to prepare a draft Reliability Standards Audit Worksheet (“RSAW”) and any other documentation necessary and appropriate consistent with the foregoing compliance/enforcement approach that will address concepts on how compliance will be addressed that should be posted with the draft combined standard.

FURTHER RESOLVED, that the Standards Committee and NERC management are directed to provide an update to the SOTC at the November 6, 2013 SOTC meeting on the status of the development of the draft combined standard and the RSAW.

Review of Standards Process Effectiveness

Action

None

2013 Enhancements

The Standards Committee (SC), working with NERC standards staff and stakeholders, has implemented the following enhancements in 2013:

- Reformed the SC Charter, reinforcing the SC's accountability to the NERC Board of Trustees (Board).
- Established and used informal, upfront consensus-building in the standards development process.
- Established a Project Management and Oversight Subcommittee (PMOS) that worked with NERC standards staff and SC leadership to develop a dashboard and project tracking mechanism that is posted on a monthly basis to the NERC website. The PMOS was also charged to work with NERC standards staff to address impasses experienced by standard drafting teams (SDTs).
- Reformed the Standards Committee Process Subcommittee (SCPS) charter and began work to reduce the volume of procedures and improve the quality of those procedures.
- Developed a five-year review template and implemented the template for each of the five-year review projects.
- Conducted biannual coordination meetings between leadership of the SC and NERC technical committees.
- Embedded the retirement of unnecessary Reliability Standard requirements as a good standard drafting practice in each of the Reliability Standard projects.
- Created smaller, more agile SDTs.
- Implemented coordination guidelines with the Reliability Issues Steering Committee (RISC).
- Accepted the Independent Expert Review Panel's final report as input into the 2014-2016 Reliability Standards Development Plan (RSDP) and assisted NERC staff in developing a new approach to the RSDP.
- Implemented a new requirement for facilitator training for NERC standard developers and chairs of SDTs.
- Piloted the cost-effectiveness analysis process (CEAP).

Future Enhancements

The SC developed a 2014-2016 Strategic Work Plan (Work Plan), which has been submitted for the Board's approval as part of the SC report at the Board's November 7, 2013 meeting. The Work Plan builds on the 2013-2015 Strategic Work Plan, and includes a number of tasks to be completed in the near future to continue to enhance the standards development process with the goal of reaching a steady-state of Reliability Standards by the end of 2015, if not sooner. Task #3 of the Work Plan states that NERC standards staff, the SC leadership, and the PMOS shall review and discuss lessons learned from the 2013 upfront informal consensus building process. This lesson learned review includes the following elements from the Resolution of the Appeal (discussed more fully below) related to the July 10 and 18, 2013 Standards Authorization Request (SAR) and standard postings for comment and ballot (see details below):

- Under what circumstances commenting on an informal SAR could or should be coupled with the commenting and/or balloting of a draft Reliability Standard and what additional administrative activities and/or communications should occur under those circumstances to ensure transparency throughout the standards drafting process; and
- How to improve the predictability and communication of the proposed process for standards development, especially when the process for development of a specific Reliability Standard or project may deviate from the expected/customary process. This evaluation should include proposed additional activities and/or communications and timing of such activities and/or communications.

Based on the lessons learned review, a report will be developed and presented to the SC. The report shall contain recommendations for enhancements in the upfront consensus building process, if any, that NERC standards staff and PMOS shall implement in 2014. NERC standards staff, SC leadership and PMOS will post any proposed 2014 enhancements for stakeholder comment prior to finalizing the report. Once agreement on a 2014 upfront consensus building approach is reached by the SC during its December face-to-face meeting, the approach will be communicated to all stakeholders so there is clear understanding and predictability for the 2014 upfront consensus building process.

Status of Appeal Regarding Simultaneous Post of a Draft SAR and Standard with a Ballot

On August 9, 2013, an appeal was filed by the Canadian Electricity Association (CEA), Essential Power, LLC, and the Midcontinent Independent System Operator, Inc. (the Appellants) challenging the SC's actions on July 10 and July 18, 2013 as violating process steps required in the Standard Processes Manual by voting in favor of (for five different projects) a simultaneous posting of a SAR for comment, a draft standard for comment with an initial ballot conducted during the last 10 days, and the solicitation of nominations for SDTs.

A [resolution of the appeal](#), agreed to by the Appellants, the Chair and Vice Chair of the SC, and NERC staff, was approved by the SC at its September 19, 2013 meeting.

Reliability Standards Quarterly Status Report

Attached is the Reliability Standards Quarterly Status Report. Key points of the report include:

- *Informal Development Projects*
 - Five projects addressing 67 FERC directives and proposing to retire 66 requirements based on Paragraph 81 criteria completed informal development in July 2013 and have transitioned into formal development.
 - Industry comments are generally positive on the use of an informal consensus building process, but there are lessons learned that will be used to enhance informal development in the future.
- *2014-2016 Reliability Standards Development Plan (RSDP)*
 - Continues to emphasize addressing outstanding regulatory directives and the application of Paragraph 81 and results-based concepts to all existing and future Reliability Standard projects.
 - The 2014-2016 RSDP is being presented to the Board of Trustees (Board) for adoption substantially in the form presented and subsequent filing with applicable regulatory authorities.
- *Paragraph 81 Quarterly Update*
 - Paragraph 81 criteria continue to be applied across all standards development projects, and as a result many individual projects are resulting in a net reduction in the number of standards and requirements.
 - Fourth quarter 2013 Board adoptions are lower than originally projected, because two groups of standards (those from the informal development projects and the Coordinate Interchange Project) are now scheduled for Board adoption in February 2014.
 - Once approved, the standards scheduled for Board adoption in February 2014 will result in a net reduction of 19 standards and 82 requirements.
- *Regulatory Directives Update*
 - At year end 2012, there were 191 directives and FERC guidance to be resolved; at the end of the third quarter of 2013, 58 of those have been addressed. The attached report includes a summary of progress to date.
- *Standards Committee (SC) Response to the Board's Resolution on the Independent Expert Review Panel Report*
 - In August 2013, the Board directed the SC to review the findings in the Independent Experts Review Panel Report, determine how the SC will include those findings in its 2014-2016 work plans, and provide a report at the Board's November 2013 meeting.
 - Several tasks in the 2014-2016 SC Strategic Work Plan, which is being presented to the Board for approval, are identified in the report to address the Board's resolution.

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Reliability Standards

Standards Oversight and Technology Committee
Quarterly Status Report

November 6, 2013

RELIABILITY | ACCOUNTABILITY



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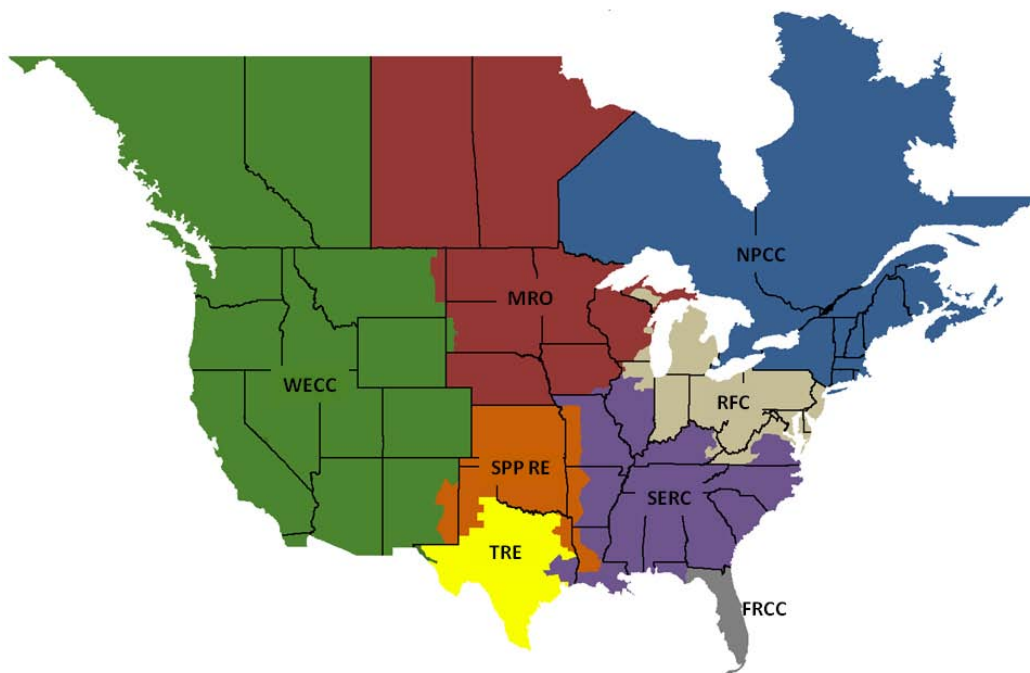
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Preface

The North American Electric Reliability Corporation (NERC) is a not-for-profit international regulatory authority whose mission is to ensure the reliability of the Bulk-Power System (BPS) in North America. NERC develops and enforces Reliability Standards; annually assesses seasonal and longterm reliability; monitors the BPS through system awareness; and educates, trains, and certifies industry personnel. NERC’s area of responsibility spans the continental United States, Canada, and the northern portion of Baja California, Mexico. NERC is the electric reliability organization (ERO) for North America, subject to oversight by the Federal Energy Regulatory Commission (FERC) and governmental authorities in Canada. NERC’s jurisdiction includes users, owners, and operators of the BPS, which serves more than 334 million people.

The North American BPS is divided into several assessment areas within the eight Regional Entity (RE) boundaries, as shown in the map and corresponding table below.



FRCC	Florida Reliability Coordinating Council
MRO	Midwest Reliability Organization
NPCC	Northeast Power Coordinating Council
RFC	ReliabilityFirst Corporation
SERC	SERC Reliability Corporation
SPP-RE	Southwest Power Pool Regional Entity
TRE	Texas Reliability Entity
WECC	Western Electric Coordinating Council

Informal Development Projects

In early 2013, NERC and the Standards Committee (SC) implemented a number of reforms and enhancements to the standards development process to more effectively and efficiently transform the current set of standards to a stable, high quality, technically sound, results-based body of standards. One of the primary enhancements implemented by NERC staff and the SC is the use of collaboration and consensus building prior to initiating the formal standard development process. The desired outcome from this upfront collaboration and consensus building is to change the paradigm from using balloting as a means to build consensus, to balloting as a means to confirm that consensus has been achieved.

The following five projects included in the 2013-2015 RSDP completed the informal development stage in July 2013, transitioned into formal development, and have completed their first comment and ballot period:

- Project 2012-05 ATC Revisions (MOD A) – MOD-001-2
- Project 2010-03 Modeling Data (MOD B) – MOD-032-1, MOD-033-1
- Project 2010-04 Demand Data (MOD C) – MOD-031-1
- Project 2013-04 Voltage and Reactive Control – VAR-001-4, VAR-002-3
- Project 2010-01 Training – PER-005-2

These projects address 67 FERC directives and propose to retire 66 requirements based on Paragraph 81 criteria. All of the projects are being posted for a successive comment and ballot period.

Based on industry comments to date, the initial impressions on the use of an informal consensus building process has been very positive. As with any new innovation, there are lessons learned and potential for improvement. In the future, these enhancements will be used to improve informal development.

2014-2016 Reliability Standards Development Plan

NERC staff and a group of SC members developed the [2014-2016 Reliability Standards Development Plan](#) (RSDP), which was presented to the SC for endorsement on October 17, 2013. The 2014-2016 RSDP is a continuation of the new approach set forth in the [2013-2015 RSDP](#), with several significant incremental improvements to facilitate the transformation of NERC Reliability Standards to a “steady-state.”¹ By addressing ongoing work along with new prioritizations, NERC expects to be at steady-state by the end of 2015.

As in the 2013-2015 RSDP, the 2014-2016 RSDP continues to emphasize addressing outstanding regulatory directives and the application of Paragraph 81 and results-based concepts to all existing and future Reliability Standard projects. To enhance the approach of the 2013-2015 RSDP, the 2014-2016 RSDP also provides a holistic overview of each Reliability Standard family with respect to its status on the path to steady-state. It also prioritizes 2014 Reliability Standard projects with consideration of the Reliability Issues Steering Committee (RISC) rankings, regulatory directives and deadlines, and the 2013 Independent Expert Review Panel’s (IERP’s) report.

More specifically, the RSDP approach to prioritizing Reliability Standards projects considered Reliability Standard family priorities as applied to individual projects and outstanding work, and considered several specific elements, such as: (i) RISC Category Rankings; (ii) regulatory directives; (iii) regulatory deadlines; (iv) Reliability Standard requirement candidates for retirement, (v) the IERP content and quality assessments; and (vi) additional considerations (fill-in-the-blank status, five year assessment commitments). The application of these elements prioritizes each Reliability Standard project as High, Medium, Low, or Pending Technical Committee input.

For purposes of implementation of the Reliability Standard projects in the RSDP, NERC standards staff and the Project Management and Oversight Subcommittee (PMOS) of the SC will continue to coordinate and track the projects via its Project Tracking Spreadsheet. Standard projects submitted or created after completion of this RSDP will go through the same prioritization, as applicable, to coordinate the projects into the plan.

The RSDP is being presented to the NERC Board of Trustees (Board) at its November meeting for adoption substantially in the form presented and subsequent filing with applicable regulatory authorities.

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

Standards Development Forecast (Continent-wide)

Board Forecast for Standard Projects in Active Development

November 2013

- Project 2007-17.2 Protection System Maintenance and Testing—PRC-005-3
- Project 2013-03 Geomagnetic Disturbance Mitigation—EOP-010-1
- Project 2010-13.2 Phase 2 of Relay Loadability: Generation—PRC-023-3
-
- Interpretation 2012-INT-04 Interpretation of CIP-007 for ITC Transmission
- Interpretation 2012-INT-06 Interpretation of CIP-003 for Consumers Energy
- 2014-2016 Reliability Standards Development Plan
- Project 2010-17 Definition of Bulk Electric System²

February 2014

- Project 2010-14.1 Phase 1 of Balancing Authority Reliability-Based Controls: Reserves—BAL-002-2³
- Project 2012-05 ATC Revisions (MOD A)—MOD-001-2
- Project 2010-03 Modeling Data (MOD B)—MOD-032-1, MOD-033-1
- Project 2010-04 Demand Data (MOD C)—MOD-031-1
- Project 2013-04 Voltage and Reactive Control—VAR-001-4, VAR-002-3
- Project 2010-01 Training—PER-005-2
- Project 2010-05.1 Phase 1 of Protection Systems: Misoperations—PRC-004-3⁴
- Project 2007-06 System Protection Coordination—PRC-027-1⁵
- Project 2008-12 Coordinate Interchange Standards—INT-004-2, INT-006-4, INT-009-2, INT-010-2, INT-011-1
- Project 2012-13 Revisions to NUC-001-1 from Five-Year Review—NUC-001-3
- Affirmation of certain standards resulting from periodic reviews

Additional Information for Selected Projects – See Addendum 1

- Project 2013-03 Geomagnetic Disturbance Mitigation
- Project 2010-17 Definition of Bulk Electric System

Additionally, status and next steps on Project 2007-02 Operating Personnel Communications Protocols—COM-003 will be considered by the Standards Oversight and Technology Committee (SOTC) at its November 6, 2013 meeting and the Board at its November 7, 2013 meeting. For more information, see the background documents included in the November 6 SOTC agenda package and the November 7 Board agenda package.

² The revised definition is expected to be presented to the Board for approval through an action without a meeting by the end of 2013.

³ Rescheduled to the February Board meeting to address comments received during the formal comment period and additional ballot that ended on September 17, 2013 with a 58.23 percent approval rating.

⁴ Rescheduled to the February Board meeting to address comments received during the formal comment period and additional ballot.

⁵ Rescheduled to the February Board meeting to address comments received during the formal comment period and successive ballot.

Paragraph 81 Quarterly Update

Paragraph 81

On June 19, 2013, FERC issued a Notice of Proposed Rulemaking (NOPR) proposing to approve the retirement of all of the requirements that were proposed for retirement under Phase 1 of the Paragraph 81 project. In addition, FERC proposed to retire 41 directives that are not necessary for reliability.

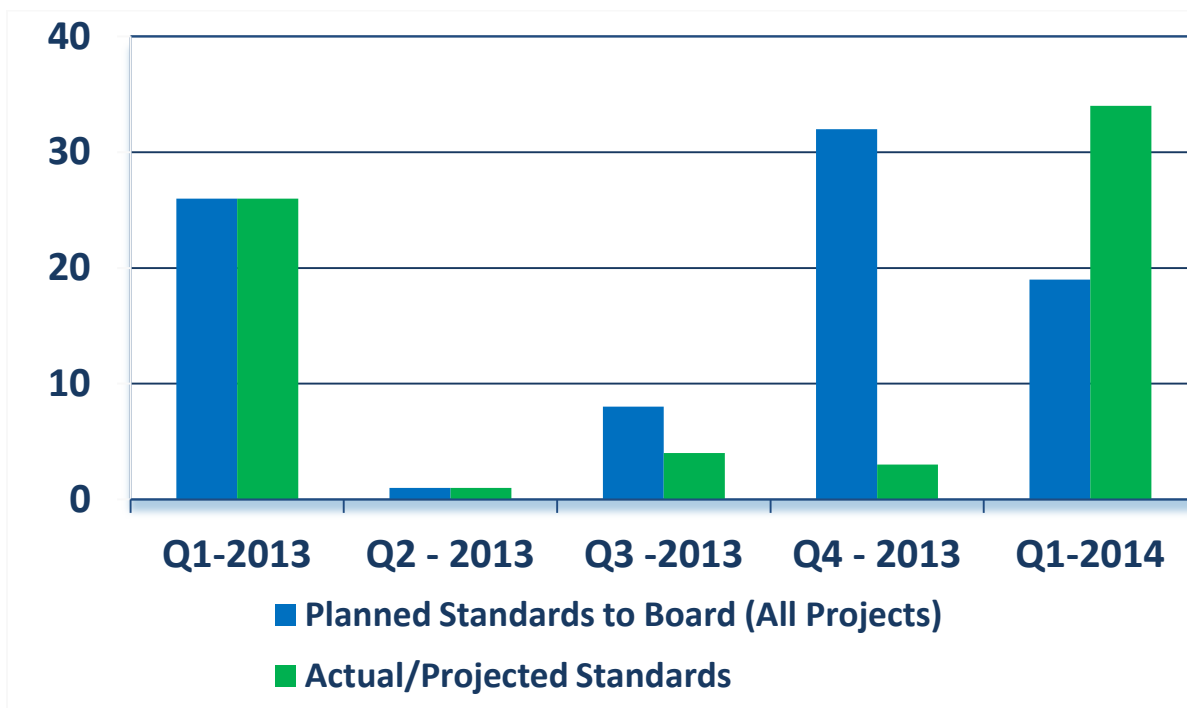
Planned Schedule for Board Action

Progress to address Phase 2 of Paragraph 81 through individual standards projects is ongoing. The projects expected to be presented for Board adoption during the fourth quarter 2013 include adoption of three standards and retirement of two standards.

An additional 17 standards in 11 projects are scheduled to be presented to the Board for adoption in February 2014. These projects collectively reduce the number of standards in the subject areas covered by the projects by half, from 36 currently enforceable or Board-approved standards to 17. The projects also reduce the number of requirements by approximately 54 percent, from a total of 152 requirements in the standards that are being retired to 70 requirements in the new standards.

The following chart has been updated to show progress against the 2013-2015 RSDP. The delta in the fourth quarter number of standards presented to the Board as compared to the plan is a result of multiple factors. The first contributor to the reduction in standards being brought for adoption in the fourth quarter 2013 was the need to conduct additional ballots for five projects that had been the subject of informal development (“informal development projects”). These projects account for a total of 20 standards, which will ultimately be consolidated or replaced by seven standards. The second major contributor was a decision during the third quarter to delay balloting of a group of Coordinate Interchange (INT) standards to solicit additional stakeholder feedback prior to balloting.

The delta in the first quarter 2014 number is primarily due to revisions to schedules of projects for standards that were being developed or were the subject of five-year reviews in the second half of 2013.



Regulatory Directives Update

Summary of Directives

At year end 2012, there were 191 directives and FERC guidance to be resolved; at the end of the third quarter of 2013, 58 of those have been addressed. Progress year to date is:

- Nine (9) directives were addressed in the first quarter filings
 - Project 2007-12 (Frequency Response): 2
 - Project 2007-17 (Protection Systems): 5
 - Project 2010-11 (TPL Footnote B): 2
- Forty-nine (46) directives were filed in the second quarter⁶
 - Project 2012-08 (Phase 1 Glossary): 3
 - Project 2006-06 (IRO): 8
 - Project 2007-03 (TOP): 29
 - Project 2007-09 (Generator Verification): 6
- One (1) directive was filed in the third quarter and two (2) additional directives were resolved:
 - Project 2010-13.2 (Generator Relay Loadability; PRC): 1
 - Resolved: Project 2012-08 (Regional Glossary Definition): 1
 - Resolved: Project 2007-06 (System Protection Coordination): 1

As of the end of third quarter, one-hundred thirty-three (133) of the directives outstanding at the end of 2012 are left to be addressed.

- 89 are projected to be addressed in 2013
- 44 are projected to be addressed in the first half of 2014

In addition to NERC's efforts to address FERC directives, FERC issued a NOPR on June 20, 2013⁷ proposing to withdraw 41 outstanding FERC directives, 22 of which apply to standards, based on the following three guidelines:

1. Whether the reliability concern underlying the outstanding directive has been addressed in some manner, rendering the directive stale;
2. Whether the outstanding directive provides general guidance for standards development rather than a specific directives; and
3. Whether the outstanding directive is redundant with another directive.

⁶ The second report stated that 49 directives were filed in Q2. This included three directives that were filed in December 2012 (BES and PRC-006-SERC-1).

⁷ *Electric Reliability Organization Proposal to Retire Requirements in Reliability Standards*, 143 FERC ¶ 61,251 (June 20, 2013).

Additional Directives

In 2013, FERC issued 29 additional directives, many of which NERC has already begun to address. The 29 directives that FERC issued include:

- Four directives and 13 guidances⁸ over Stage 1 and Stage 2 of the Geomagnetic Disturbance Mitigation Project in FERC Order No. 779.⁹
- Five directives for the Definition of the Bulk Electric System in the FERC order issued on December 20, 2012.¹⁰
- Five directives in the FERC Order No. 777 approving FAC-003-2.¹¹
- Two directives in FERC Order No. 772 approving the SERC Regional Standard PRC-006-SERC-01.¹²

Of these 29 directives, five directives have been addressed in filings by the end of the third quarter:

- Bulk Electric System: 1
- FAC-003-2: 2
- PRC-006-SERC-01: 2

As of the end of the third quarter, there are 157 total directives (133 from 2012 plus 24 from 2013) to be addressed.

⁸ The final count is currently being determined.

⁹ *Reliability Standards for Geomagnetic Disturbances*, Final Rule, 143 FERC ¶ 61,147 (May 16, 2013).

¹⁰ These directives were issued in *Revisions to Electric Reliability Organization Definition of Bulk Electric System and Rules of Procedure*, 141 FERC ¶ 61,236 (December 20, 2012), after the 2012 year-end number of directives was established. One of the directives was resolved in the April 4, 2013 NERC Compliance Filing.

¹¹ FERC Order No. 777, *Revisions to Reliability Standard for Transmission Vegetation Management* (March 21, 2013).

¹² These directives were issued by FERC in Order No. 772, *Regional Reliability Standard PRC-006-SERC-01 – Automatic Underfrequency Load Shedding Requirements* (December 20, 2012), after the 2012 year-end number of directives was established and were resolved in the March 11, 2013 NERC Compliance Filing in response to FERC Order No. 772.

Standards Committee Report

This report highlights key activities of the SC and its associated subcommittees.

2014-2016 Standards Committee Strategic Work Plan

The SC has approved a [2014-2016 Strategic Work Plan](#) (Work Plan), which builds on the 2013-2015 Strategic Work Plan. The Work Plan includes a number of tasks to be completed to continue to enhance the standards development process with the goal of reaching a steady-state of Reliability Standards by no later than the end of 2015. The Work Plan includes the following tasks:

- Evaluation and enhancement of the SC's and its subcommittees' charters, as needed (to be completed by the December 2013 SC meeting);
- Enhanced prioritization and scheduling of Reliability Standard projects to balance the movement to a steady-state with stakeholder resources (to be completed by the December 2013 SC meeting);
- NERC standards staff and the PMOS are to enhance the Project Tracking Spreadsheet posted on the NERC web site or develop another spreadsheet/dashboard to indicate whether standard drafting teams (SDTs) are being "directionally consistent" with IERP's findings and recommendations (including requirements that are candidates for retirement and content and quality grading) as well as stakeholders Paragraph 81 Phase 1 requirement retirement recommendations (to be completed by December 31, 2013);
- Evaluation of the 2013 informal consensus building process, with stakeholder feedback and consideration of enhancements for 2014 (to be completed by the December 2013 SC meeting). The implementation of enhancements in 2014 will be effectively and proactively communicated;
- Reinforced commitment to implement the Cost Effective Analysis Process (CEAP) for applicable Reliability Standards projects in 2014;
- Enhancement of training material for SDTs to highlight the use of the IERP's decision-tree for content and quality and the need for consideration of content and quality findings (to be completed by January 31, 2014);
- Moving to a steady-state of procedures that are less voluminous and with the objective of improving the effectiveness and efficiency of the SC and SDTs (to be completed by May 2014);
- Consideration of the IERP findings, including identified gaps, quality and content issues, and candidates for retirement, including a RISC's coordinated triage of the Appendix F gaps identified by IERP, with the triage activities to be completed by the second quarter of 2014.

Response to Board's Resolution on Independent Expert Review Panel's Report

On September 19, 2013, the SC received a detailed presentation on the IERP's final report and findings by Bill Thompson (one of the independent experts) and Valerie Agnew, director of standards development. Several of the tasks included in the above-referenced Work Plan specifically address the Board's August resolution that reads in part as follows:

“ . . . the Board hereby directs the Standards Committee to (i) promptly review the findings contained in the [Independent Expert’s] Report, (ii) determine how the Committee will include those findings in its 2014-2016 work plans, including, but not limited to, how it will approach the retirement of candidate standard requirements and address the identified priority gaps in standards and (iii) provide a report at the Board’s November 2013 meeting as to the Committee’s implementation plan, including proposed timelines.”

The tasks underway to address the Board’s resolution include:

- The analysis of the IERP’s Appendix F gaps with RISC (completed September 5, 2013), and recommended analysis/consideration of the gaps by the Operating Committee, Planning Committee and SDTs, as applicable, with all recommended analysis/considerations to be completed by the second quarter of 2014;
- Inclusion of the IERP’s findings in the 2014-2016 RSDP to assist with organization and transparency of the findings (including requirements that are candidates for retirement and content and quality grading) as they relate to transforming Reliability Standard families to a steady-state (completed October 17, 2013);
- The NERC standards staff and the PMOS are to enhance the Project Tracking Spreadsheet posted on the NERC web site or develop another spreadsheet/dashboard to indicate whether SDTs are being “directionally consistent” with the IERP’s findings and recommendations (including requirements that are candidates for retirement and content and quality grading) as well as stakeholders Paragraph 81 Phase 1 requirement retirement recommendations (to be completed by December 31, 2013);
- The enhancement of training material for SDTs to highlight the use of the IERP’s decision-tree for content and quality and the need for consideration of content and quality findings (to be completed by January 31, 2014); and
- By the end of 2014, the SC, with stakeholder input, shall decide whether to implement the IERP’s recommended new construct of 10 categories of NERC Reliability Standards.

Additional Activities

At its September 19, 2013 meeting, the SC approved a quality review procedure to assist in the quality review of standard projects to improve, as needed, the quality of standard project documents posted for stakeholder comment.

The SC also approved a standards process waiver and the solicitation of a new SDT to provide the Board with potential additional options in the context of its consideration of COM-003-1 and COM-002-3.

The SC also completed (via a task force) a review of the NERC Rules of Procedure (and any associated reference documents) related to the fairness, openness, balance and inclusiveness of the Registered Ballot Body and any qualifications on a segment representative being an eligible candidate for that segment’s nomination for a seat on the SC. The task force determined that no actions or changes are needed at this time.

SC agendas and meeting minutes are posted at: [\[Standards Committee\]](#)

Addendum 1

Additional Information for Selected Projects

Project 2013-03 Geomagnetic Disturbance Mitigation (GMD)

On May 16, 2013, FERC issued Order No. 779 directing NERC to develop Reliability Standards addressing the potential impact of GMDs in two stages:

- Stage 1 Standard(s), to be filed by January 21, 2014, requiring applicable entities to implement Operating Procedures.
- Stage 2 Standard(s) to be filed by January 21, 2015, requiring applicable entities to conduct assessments of the impacts of benchmark GMD events on their systems and requiring the development and implementation of a plan to mitigate the risk of instability, uncontrolled separation, or cascading, if impacts are identified.

FERC further directed that NERC identify, through its standards development process, the benchmark GMD event (including a technical justification for the selected benchmark) that entities will use in their vulnerability assessments.

The SDT will begin intensive development of Stage 2 Standard(s) once the Stage 1 Standard(s), EOP-010-1 Geomagnetic Disturbance Operations, has been adopted by the Board. Technical supporting work for Stage 2 Standard(s) is being conducted by the GMD Task Force (GMD TF) according to an accelerated schedule. Several members of the drafting team also fill leadership roles on the GMD TF, which enhances coordination on technical issues.

The GMD TF is completing a set of planning guides and generalized thermal and electrical response models for a population of tested transformers. These tools will enable system planners to perform GMD vulnerability assessments and mitigation planning. NERC staff, GMD TF leadership, and partners at Electric Power Research Institute are developing a wide-area pilot assessment, which will begin in early 2014. The objectives of this assessment are to evaluate the effectiveness of GMD planning tools and methods available to industry, analyze results produced by study participants for various GMD reference storm scenarios, and validate the overall strength of the vulnerability assessment processes and tools for reflection within the NERC GMD standard. Results from the pilot assessment are targeted for mid-2014.

Potential Issues

The schedule for completing technical supporting work and developing the Stage 2 Standard(s) to meet the January 2015 filing deadline is aggressive. The drafting team is concerned that directives to "evaluate the primary and secondary effects of GICs" will initially exceed industry's capabilities as some assessment tools, such as a transformer thermal screening tool, are not commercially available. The drafting team is considering reference storm scenarios produced by government researchers and will consider results from the GMD TF pilot assessment to develop the proposed benchmark GMD event and technical justification.

Waiver of Standards Process

On October 9, 2013, NERC staff asked the SC to consider a waiver of the standard process to shorten the final ballot of EOP-010-1 from 10 days to seven days to meet the FERC-directed filing schedule and Board meeting schedule, with the waiver, if authorized, to be exercised only if: 1) EOP-010-1 received sufficient support during the ballot ending on October 18, 2013 to proceed to final ballot, and 2) the drafting team decides after reviewing comments from the posting of EOP-010-1 ending on October 18, 2013, that the shortened time is necessary to provide adequate opportunity to fully consider stakeholder comments and prepare and review documents for posting for the final ballot.

The initial draft of EOP-010-1 was posted for 45-day formal comment period and initial ballot through August 12, 2013, and received a weighted segment approval of 62.74 percent.

The Board meeting on November 7, 2013, is the last regular scheduled Board meeting prior to the FERC filing deadline for the Stage 1 Standard. Because of the high profile nature of Project 2013-03 (GMD Mitigation), the drafting team recognizes that it is particularly appropriate for the standard to be submitted to the Board for adoption during the quarterly meeting, if possible. This will ensure the standard is considered for adoption under NERC's normal open and transparent process without special arrangements for a Board conference call.

The drafting team has maintained a rigorous development and communication effort in order to reach the November NERC Board meeting milestone. If the waiver is authorized by the SC and the drafting team decides to exercise the waiver, this will be reported to the Board when the standard is presented for adoption.

Planned Schedule for Board Action

Board action on Stage 2 Standard(s) is planned for the November 2014 meeting.

Project 2010-17 Definition of Bulk Electric System (BES)

On November 18, 2010, FERC issued Order 743 and directed NERC to revise the definition of Bulk Electric System (BES) so that the definition encompasses all Elements and Facilities necessary for the Reliable Operation and planning of the interconnected Bulk-Power System (BPS). Phase 1 of Project 2010-17 Definition of Bulk Electric System concluded on November 21, 2011 with stakeholder approval of a revised definition of BES and application form titled 'Detailed Information to Support an Exception Request' referenced in the Rules of Procedure Exception Process. The revised definition, modifications to the Rules of Procedure to provide a process for determining exceptions to the definition, and an application form to support that process, were presented to the Board for adoption and then filed with regulatory authorities for approval.

On December 20, 2012, FERC issued Order No. 773, approving the definition of BES filed as a result of Phase 1 of the Definition of Bulk Electric System project. In Order No. 773, as clarified in Order 773-A, FERC directed NERC to: (1) modify the exclusions for radial systems (Exclusion E1) and local networks (Exclusion E3) so that the exclusions do not apply to tie-lines, i.e., generator interconnection facilities, for BES generators; and (2) modify the local network exclusion to remove the 100 kV minimum operating voltage to allow systems that include one or more looped configurations connected below 100 kV to be eligible for the local network exclusion.

In Order No. 773-A, FERC noted that facilities below 100 kV can be a significant factor in a major blackout. FERC cited the joint NERC and FERC staff report on the September 8, 2011, [Arizona-Southern California blackout](#) in support of its decision to include all facilities that have a material impact on the reliability of the BPS. FERC's analysis of the impact of the revisions to the definition of BES to address Order No. 773 directives reflects the intention that the revised definition would not dramatically impact the footprint of the BES.

On May 23, 2013, NERC filed a motion with FERC, requesting that the effective date of Order 773 be extended by one year, from July 1, 2013 to July 1, 2014. On June 6, 2013, FERC granted this request. In its order, FERC stated that "NERC should submit a filing that includes proposed modifications to comply with the directives pertaining to exclusions E1 and E3 as soon as possible prior to December 31, 2013. Any delay in the submission of a filing that addresses the responsive modifications could impede the Commission's ability to act on the directives prior to July 1, 2014."

Waiver of Standards Process

On June 26, 2013, FERC approved the revised Standard Processes Manual (SPM), which requires each additional comment period to be 45 days. An initial ballot of the revised Definition of Bulk Electric System ended on July 12, 2013, with an approval rating of 49.73 percent. Given the time necessary to adequately consider comments,

conduct outreach, and develop revisions to reach stakeholder consensus, adhering to a 45-day posting schedule would have limited the team to a single successive comment period and ballot in order to file the revised definition by the December 31, 2013 FERC deadline. Accordingly, after consultation with the SDT leadership and the SC PMOS representative, NERC standards staff and the SDT leadership requested that a waiver be granted by the SC, to allow for the next and any additional successive comment and ballot period(s) for Phase 2 of Project 2010-17, prior to the final ballot, to be shortened to a 30-day period with the ballot during the last ten days of the 30-day period. On August 2, 2013, the SC approved this waiver request.

Planned Schedule for Board Action

The revised definition is expected to be presented to the Board for approval through an action without a meeting by the end of 2013.

Periodic (Five-year) Reviews of Standards

Section 13 of the SPM requires that periodic reviews be conducted of Reliability Standards, at least once every 10 years¹³ from the effective date of the Reliability Standard or the date of the latest adoption by the Board to a revision of the Reliability Standard, whichever is later.

During 2013, NERC initiated its first periodic reviews of standards. Reliability Standards in five families of standards we have been, or are being reviewed by teams of subject matter experts appointed by the SC: Resource and Demand Balancing; Emergency Preparedness and Operations; Facilities Design, Connections, and Maintenance; Interconnection Reliability Operations and Coordination; and Nuclear.

To facilitate the reviews, the SC worked with NERC staff to develop a uniform approach for conducting periodic reviews. A template was developed to be used by teams for documenting each review to ensure that the following were considered:

- Whether the standard is necessary for reliability, and if so whether the requirements are adequately clear, technically sound, and results-based;
- Whether any Requirements meet Paragraph 81 criteria; and
- The recommendations of the Independent Expert Review Panel.

Each team was assigned to review a family of standards, and concentrated its review on standards that have not been substantively revised since Reliability Standards became enforceable in 2007, while also considering other standards in the family in order to evaluate consistency, as well as possible opportunities for consolidation or streamlining. As a result of this review, the team prepared an initial draft recommendation for each standard it reviewed, indicating whether the standard should be affirmed (no changes required); revised; or retired. These recommendations were posted for stakeholder comment, and feedback from these comments was incorporated into final recommendations provided to the SC. Recommendations for revising standards will be incorporated into the standards development work plan for 2014. Standards to be affirmed as a result of periodic reviews will be presented to the Board for adoption in February 2014.

Reviews of several standards in the EOP and FAC families had outstanding Paragraph 81 recommendations as well as IERP recommendations; however, completion of the reviews was deferred pending regulatory action on related standards and, for the EOP standards, to allow for compliance experience to be gained. These reviews will be conducted at a later date, as part of the effort to transition standards to a steady-state.

¹³ The previous version of the Standard Processes Manual required periodic reviews of standards to be conducted once every five years.