

Agenda Standards Oversight and Technology Committee

February 8, 2017 | 11:00 a.m.-12:30 p.m. Pacific

Westin San Diego 400 West Broadway San Diego, CA 92101

Conference Room: Emerald Ballroom (2nd floor)

Call to Order

Introductions and Chair's Remarks

NERC Antitrust Compliance Guidelines

Agenda Items

- 1. Minutes* Approve
 - a. November 1, 2016 Meeting
- 2. Standards Oversight and Technology Committee Self-Assessment Results* Review
- 3. ERO Enterprise IT Application Strategy Update* Review
- 4. Functional Model* Update
- 5. Cyber Security Supply Chain Management Standard* **Update**
- 6. Guidelines and Technical Basis* Update
- 7. Reliability Standards Quarterly Status Report* Review
- 8. Adjournment

^{*}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.

Agenda Item 1a Standards Oversight and Technology Committee Meeting February 8, 2017

DRAFT Minutes

Standards Oversight and Technology Committee

November 1, 2016 | 9:45-10:45 a.m. Eastern

Ritz-Carlton Buckhead 3434 Peachtree Road Atlanta, GA 30326

Mr. Kenneth G. Peterson, Chair, called to order a duly noticed meeting of the Standards Oversight and Technology Committee (the "Committee") of the Board of Trustees ("Board") of the North American Electric Reliability Corporation ("NERC") on November 1, 2016, at 9:45 a.m. Eastern, and a quorum was declared present. The agenda is attached as **Exhibit A.**

Present at the meeting were:

Members: Board Members:

Kenneth G. Peterson, Chair Janice Case

Paul F. Barber Gerry W. Cauley, President and Chief Executive Officer

Kenneth W. DeFontes, Jr. Robert G. Clarke

Frederick W. Gorbet Jan Schori
David Goulding Roy Thilly

George Hawkins

NERC Staff:

Charles A. Berardesco, Senior Vice President, General Counsel, and Corporate Secretary

Tina Buzzard, Associate Director

Howard Gugel, Senior Director of Standards

Stan Hoptroff, Vice President and Chief Technology Officer

Mark Lauby, Senior Vice President and Chief Reliability Officer

John Moura, Director of Reliability Assessment and System Analysis

Steven Noess, Director of Standards Development

Marcus Sachs, Senior Vice President and Chief Security Officer

Janet Sena, Senior Vice President and Director of Policy and External Affairs

Michael Walker, Senior Vice President and Chief Financial and Administrative Officer

NERC Antitrust Compliance Guidelines

Mr. Peterson directed the participants' attention to the NERC Antitrust Compliance Guidelines included with the agenda materials, and stated that any additional questions regarding these guidelines should be directed to Mr. Berardesco.

Minutes

Upon motion duly made and seconded, the Committee approved the minutes of the August 4, 2016 meeting as presented at the meeting.



2017-2019 Reliability Standards Development Plan

Mr. Noess presented the proposed 2017-2019 Reliability Standards Development Plan (the "RSDP"), which had been included in the advance agenda package. He noted that the proposed RSDP did not include the recent FERC orders with directives relating to GMD and supply chain, and that NERC staff would work with the Standards Committee to update the RSDP to reflect those directives. Mr. Noess reviewed the more strategic and measured approach being taken to standards development and the how the standards metric process would flow into the enhanced periodic review process. After discussion, and upon motion duly made and seconded, the Committee recommended the RSDP, including the additional directives from the two FERC orders, for Board approval.

Cost Effectiveness Pilot

Mr. Gugel summarized the status of the Cost Effectiveness Pilot, referencing the material included in the advance agenda package. He reviewed the history of the project, the approach being taken and the collaboration with the Standards Committee. Mr. Gugel summarized the results of Phase I, and outlined the approach for additional Phase I pilot and a Phase II pilot. Members of the Committee noted, during the discussion, that the approach expands options for a standards drafting team at the beginning of a project, that the approach is actually one of cost effectiveness, not cost versus benefit, and that the approach cannot really capture the opportunity costs of implementing a standard.

Reliability Standards Quarterly Status Report

Mr. Noess presented the Reliability Standards Quarterly Status Report, referencing the detailed materials that had been included in the advance agenda package. He noted that there are only 12 FERC directives currently being addressed in standards development, and that all standards-related directives from FERC Order 693 have been addressed. Mr. Noess reviewed the schedule of standards that are projected to come before the Board.

Mr. Noess summarized the recent FERC directives on GMD and supply chain and the related timeliness. With respect to the supply chain directive, NERC management worked with the Standards Committee to form a very qualified standards drafting team, and Mr. Noess noted that the current plan has a posting of a draft standard during the first quarter of 2017 and a Board submission no later than the August 2017 Board meeting. With respect to the GMD directive, Mr. Moura summarize research activities being undertaken. Mr. Cauley noted that these activities would require NERC to engage third party expertise.

NERC and ERO Enterprise IT Projects Update

Mr. Hoptroff provided an update on NERC and ERO Enterprise IT projects, referencing the detailed materials that had been included in the advance agenda package. He reviewed the status of registered entity focused projects, including user management and records, GADS, the NERC website and standards balloting. Mr. Hoptroff noted how the Company uses internal audit to conduct a post-project review to assess the actual benefits of a project compared to those projected in the business case.

Mr. Hoptroff reviewed the status of ERO Enterprise IT projects, including GADS and an overall approach for CMEP. He emphasized that these projects would enable more effective data access and analysis, and noted that for the CMEP project, the goal was to implement one common system across



the ERO Enterprise. Mr. Hoptroff reviewed the status of NERC Corporate IT projects, and reviewed those projects completed during 2017 and the 2017-2018 initiatives.

Review of Committee Mandate

Mr. Peterson noted that the Committee is require to review its mandate on an annual basis. Based on Legal Department review and the recent updating of the mandate, no modifications are necessary at this time. The Committee concurred with this conclusion.

Adjournment

There being no further business, and upon motion duly made and seconded, the meeting was adjourned.

Submitted by,

Charles A. Berardesco

Corporate Secretary



Agenda Item 2 Standards Oversight and Technology Committee Meeting February 8, 2017

Summary of 2016 Board of Trustees Standards Oversight and Technology Committee Survey

RELIABILITY | ACCOUNTABILITY











- NERC engaged TalentQuest to conduct its annual Board of Trustees Standards Oversight and Technology Committee Survey through an online methodology.
- The Standards Oversight and Technology Committee survey was administered from November 8 to December 20, 2016, to a total of six (6) Committee members.
- 6 Committee members responded to the survey.
 - 100% response rate.



- Respondents were asked to rate items on a 1 to 5 point scale to indicate their evaluation for each rated item:
 - 1 = Needs Prompt Attention ("unacceptable performance")
 - 2 = Below Expectations ("performance area with opportunity for improvement")
 - 3 = Meets Expectations ("meets the required standard of performance")
 - 4 = Exceeds Expectations ("exceeds the required standard of performance")
 - 5 = Outstanding ("far exceeds the required standard of performance")
- Additional items were evaluated by selection of "Yes" or "No" to indicate agreement or disagreement.
- For any item rated "1" (Needs Prompt Attention), "2" (Below Expectations), or "No", mandatory comments were required to explain the rationale for the rating or selection.

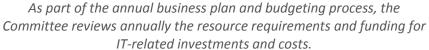




- The overall Standards Oversight and Technology Committee survey average was 3.94, with item averages ranging from 3.50 to 4.33.
- Given the lowest item averages are well above 3.00, the Standards Oversight and Technology Committee is seen to be operating at expectations or higher.



SOTC Highest Rated Items



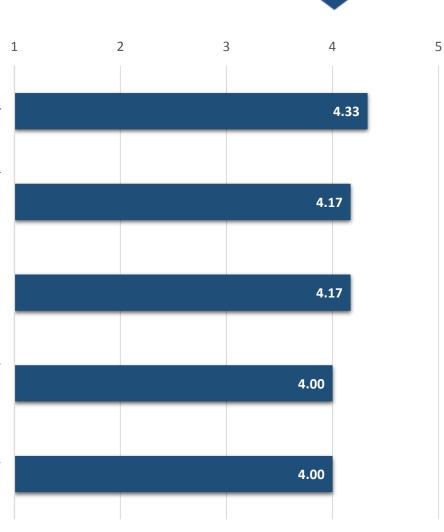
The Committee monitors overall results of the standards development process, and makes recommendations to the NERC Standards

Committee, Board and management regarding potential improvements.

The Committee provides advice and recommendations to the Board on any technology-related issues referred to it by the Board.

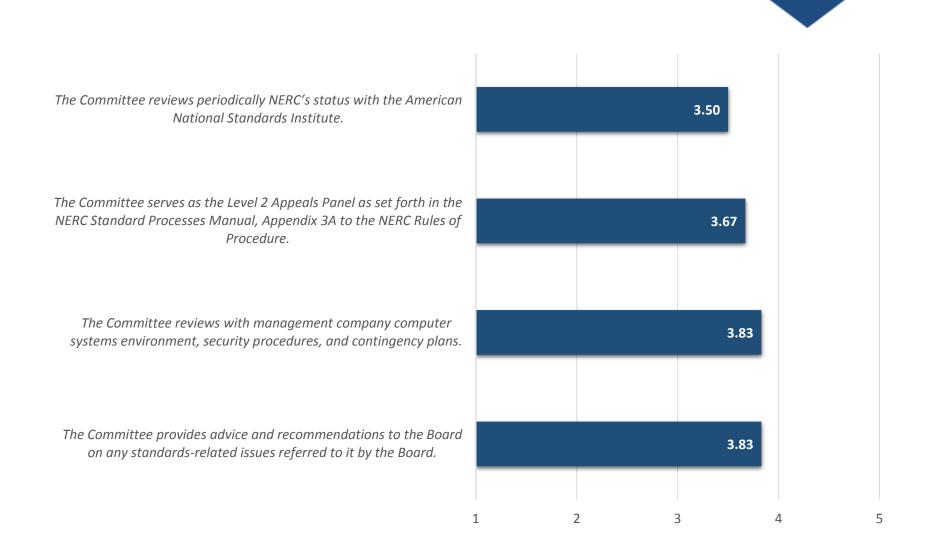
In collaboration with the Reliability Issues Steering Committee, the Committee assesses emerging reliability risks affecting standards, making recommendations as appropriate.

The Committee monitors progress in addressing regulatory mandates and directives related to standards.





SOTC Lowest Rated Items





Committee Functioning

- Across all Committee surveys, 4 "Yes/No" items were asked in regard to committee functioning. Each committee, including the Standards Oversight and Technology Committee, rated these items with a 100% response of "Yes":
 - The number of Committee meetings is appropriate.
 - The size of the Committee is appropriate.
 - The information provided in support of the agenda is appropriate and available in a timely manner in advance of Committee meetings.
 - The Committee Chair manages meetings efficiently to allow for open, equal, and sufficient discussion and construction input on important issues.

Agenda Item 3 Standards Oversight and Technology Committee Meeting February 8, 2017

ERO Enterprise IT Application Strategy Update

Action

Review

Background

At the November 2016 Standards Oversight and Technology Committee (SOTC) open meeting, Information Technology (IT) provided an update on projects currently planned or underway for the following three NERC IT clients:

- Regional Entities
- Electricity Information Sharing & Analysis Center (E-ISAC)
- NERC Corporate

Further, IT provided an update on 2017-2018 major ongoing initiatives including IT Projects that will benefit the registered entities.

Since the open meeting in November 2016, several ERO Enterprise projects have concluded, including the replacement of the User Management Program (UMP) with the User Management and Records (UMR) system, the creation of a data warehouse to house generation and other critical data for more refined analysis, and a new generation data analysis system to capture wind turbine data generation. In addition, significant improvements have been made to the E-ISAC portal and a data repository to be used by the E-ISAC to analyze data gathered by the Cyber Risk Information Sharing Program.

Projects currently underway include the implementation of a new portal platform for the E-ISAC, a new system to enable the registration and management of registered entities, and improvements to NERC's public-facing website.

The investigation of a new Compliance Monitoring and Enforcement Program (CMEP) tool continues. The ERO Enterprise Technology Leadership Team (ERO TLT) is focusing on ensuring that the appropriate value for such an investment exists to merit implementation of a common tool. Investments in this area will be analyzed through the review of a detailed business case by the newly formed CMEP Technology Program Executive Committee. The members of the committee include Lane Lanford (Texas RE), Tim Gallagher (ReliabilityFirst), Ed Schwerdt (NPCC), Gerry Cauley (NERC), and Stan Hoptroff (NERC). An ERO-wide steering committee, which will be chaired by Dan Skaar (MRO), has been formed and has been reviewing proposals from two professional services vendors that have expertise with these type of IT solutions and have experience with the ERO Enterprise. The selection of a vendor for tool selection and implementation assistance is scheduled for Q1 2017.

In addition to a significant focus on the ERO Enterprise, IT has begun implementation of a document management solution for NERC, leveraging SharePoint 2013 as the foundational platform. The implementation of the Document Management Program is well underway and is scheduled for completion in 2017.

The following departments were deployed in 2016: Information Technology, Human Resources, Finance and Accounting, Policy and External Affairs, Legal, Board and Board Committees (Governance), Executives, ERO Operations and Strategic Planning, and MRC. Departments scheduled for rollout in Q1-Q2 2017 are Compliance (including Registration), Enforcement, Standards and Training, and Reliability Assessment and System Analysis.

In 2017 and the coming years, IT will place enhanced emphasis on NERC's public-facing website, entity registration, CMEP, and additional enhancements to further the ERO's analytical capabilities.

Agenda Item 4 Standards Oversight and Technology Committee Meeting February 8, 2017

Functional Model

Action

Update

Background

The NERC Reliability Functional Model (Functional Model), along with its associated Technical Document, is intended to provide a framework to assist in the development and maintenance of NERC Reliability Standards. First developed in 1999 in response to major structural changes in the electric power industry, the Functional Model describes the functions that must be performed to ensure the reliability of the bulk power system, the specific tasks that are necessary to perform each function, and the relationships between and among functional entities that perform the various tasks. Currently in its fifth version, the Functional Model has been updated and revised over time to ensure the model correctly reflects the industry and incorporates new and emergent reliability related tasks. As described below, activities in 2016 to prepare revisions for a sixth version have raised several questions and discussion points for further policy consideration.

In November of 2015, the Functional Model Advisory Group (FMAG), which reports to the Standards Committee (SC), initiated activities based on their current scope document to perform a comprehensive review and assessment of the Functional Model to determine: (i) if it reflects industry practices today, and (ii) if there is a need to incorporate any new or emerging reliability-related tasks. After seeking technical input from the NERC technical committees, a revised draft was posted for industry comment from July 21 through September 7, 2016. The type and nature of the revisions proposed by the FMAG included:

- Incorporating defined terms from the NERC Glossary of Terms: A majority of the proposed revisions related to incorporation of definitions from the <u>NERC Glossary of</u> Terms.
- Consolidating ERO-related functions: In the current version of the Functional Model (version 5), there are separate functions (and associated entities) for Standards Development, Compliance Enforcement, and Reliability Assurance. These functions are all related to ensuring the reliability of the bulk power system. Therefore, all functions related to reliability assurance were combined into the Reliability Assurance function.
- Clarifying the functions of Planning Reliability, Transmission Planning, and Resource Planning: The proposed revisions identified the differences in the various planning functions, the tasks performed by the functional entities, and how the planners work together to ensure the Bulk Electric System has been planned to an adequate level of reliability.
- Clarifying how Interchange occurs: The proposed revisions provided clarity regarding how the various functions and functional entities work together to perform Interchange.
- Adding cyber and physical security tasks: The proposed revisions added two new tasks related to security protections for cyber assets and physical assets and communication

regarding an actual or suspected threat to those assets. The new tasks were proposed to be added to the Reliability Coordinator, Balancing Authority, Transmission Operator, Transmission Owner, Interchange Coordinator, Distribution Provider, Generator Owner and Generator Operator functional entities.

The comments received during the posting indicate that there is confusion and disagreement within the industry on the Functional Model, specifically: (i) its purpose; (ii) any relationship to NERC's registration criteria; (iii) ongoing usefulness or necessity; and (iv) how revisions should be coordinated with other initiatives.

Historically, the Functional Model has been treated as a standalone guidance document for the development of Reliability Standards; it is not binding on NERC's Registration or Compliance Monitoring and Enforcement Programs. However, it is apparent from the work of the FMAG in 2016 that discussion, evaluation, and outreach on the Functional Model's purpose and role are necessary before considering any further revision.

NERC staff recommends that the following actions should be taken to address the concerns raised during the comment period:

- 1. The FMAG should limit any changes to the Function Model to aligning the definitions and terms between the Functional Model, the NERC Glossary of Terms, and the Rules of Procedure. No other changes to the Functional Model should be proposed.
- 2. Prior to any future modifications to the Functional Model, the Standards Committee should seek industry input on the need for changes and the scope prior to authorizing work by the FMAG.

Additional Information

Links to the FMAG and the public posting for comment are included here for reference:

<u>Functional Model Advisory Group page</u> Functional Model revisions project page

Agenda Item 5 Standards Oversight and Technology Committee Meeting February 8, 2017

Cyber Security Supply Chain Management Standard

Action

Update

Background

On July 21, 2016, the Federal Energy Regulatory Commission (Commission) issued Order No. 829 directing NERC to develop a new or modified Reliability Standard that addresses supply chain risk management for industrial control system hardware, software, and computing and networking services associated with Bulk Electric System (BES) operations, as follows:

"[The Commission directs] NERC to develop a forward-looking, objective-based Reliability Standard to require each affected entity to develop and implement a plan that includes security controls for supply chain management for industrial control system hardware, software, and services associated with bulk electric system operations. The new or modified Reliability Standard should address the following security objectives, [discussed in detail in the Order]: (1) software integrity and authenticity; (2) vendor remote access; (3) information system planning; and (4) vendor risk management and procurement controls."

The Commission established a filing deadline of one year from the effective date of Order No. 829, which is September 27, 2017.

Summary

Proposed CIP-013-1 is a new reliability standard containing requirements to address the above directives. The proposed standard is currently posted for stakeholder comment, with initial ballot occurring in March 2017. NERC anticipates presenting the proposed standard to the Board of Trustees for adoption at or before the Board of Trustee's meeting in August 2017.

Agenda Item 6 Standards Oversight and Technology Meeting February 8, 2017

Guidelines and Technical Basis Update

Action

Update

Background

The Reliability Standards template includes a Guidelines and Technical Basis (GTB) section to provide standard drafting teams (SDTs) a mechanism to: (i) explain the technical basis for the associated Reliability Standard (and Requirements therein); and (ii) provide technical guidance to help support effective application of the associated Reliability Standard. To further clarify the principles, development, and use of GTB, NERC is drafting guidance, and will be coordinating with the Standards Committee (SC) to incorporate this guidance into the appropriate standards development guidance documentation.

Summary

Among other things, NERC and the SC will clarify the following:

- The GTB is a mechanism for SDTs to elaborate and explain the technical basis of the Reliability Standard (or specific Requirements therein).
- The GTB reflects the SDT's intent on how to understand the technology and the technical requirements in the Reliability Standard.
- In developing the GTB, the SDT should provide a sound technical basis to help understand the Requirements in the Reliability Standard.
- The GTB does not prescribe compliance approaches or compliance guidance, although it
 may provide technical guidance from the SDT designed to support effective application
 of a particular Standard Reliability (or Requirement therein).

The ERO Enterprise recognizes the GTB as a mechanism to understand the technology and technical requirements in the Reliability Standard and, as the Compliance Enforcement Authority, considers statements in GTB documents during compliance and enforcement activities. The content of the GTB is considered informative while assessing compliance. The ERO Enterprise, however, neither endorses nor approves GTB as part of the Reliability Standards development process. The GTB is included in the Reliability Standard template for informational purposes. The ERO Enterprise continues to assess compliance based on the language of the Reliability Standard and the facts and circumstances presented.

Should an entity seek ERO Enterprise endorsement of a particular compliance approach, it may submit Implementation Guidance for ERO Enterprise consideration, consistent with NERC's Compliance Guidance Policy.

Agenda Item 7
Standards Oversight and
Technology Committee Meeting
February 8, 2017

Reliability Standards Quarterly Status Report

Action

Review

Background

Attached is the Reliability Standards Quarterly Status Report. Highlights include:

• Standards Development Forecast

Forecasts the NERC Reliability Standards anticipated for completion and submission to the NERC Board of Trustees for adoption through December 2017. This section also includes a listing of all standards development projects with regulatory directives.

• Regulatory Directives Update

 Provides a summary of standards-related FERC directives and details NERC filings to FERC in support of standards development. This section provides a summary update based on the previous quarter.

• Standards Committee Report

■ The 2017-2019 Standards Committee Strategic Work Plan is presented.



Agenda Item 7 Standards Oversight and Technology Committee Meeting February 8, 2017

Reliability Standards

Standards Oversight and Technology Quarterly Report

February 8, 2017

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3353 Peachtree Road NE Suite 600, North Tower Atlanta, GA 30326 404-446-2560 | www.nerc.com

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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 long-term 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 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
RF	Reliability First
SERC	SERC Reliability Corporation
SPP-RE	Southwest Power Pool Regional Entity
TRE	Texas Reliability Entity
WECC	Western Electricity Coordinating Council

Standards Development Forecast (Continent-wide)

Board Forecast for Standard Projects in Active Development

February 2017

- Project 2015-08: Emergency Operations (EOP-004, EOP-005, EOP-006, EOP-008)
- Project 2016-01: Modifications to TOP and IRO Standards (TOP-001, IRO-002)
- Project 2016-02: Modifications to CIP Standards (Revisions to Definition of "Low Impact External Routable Connectivity")

May 2017

None

August 2017

- Project 2016-03: Cyber Security Supply Chain Management
- Project 2015-09: Establish and Communicate System Operating Limits (FAC-010, FAC-011, FAC-014)

November 2017

- Project 2016-02: Modifications to CIP Standards (Revisions unrelated to Definition of "Low Impact External Routable Connectivity")
- Project 2016-EPR-01: Enhanced Periodic Review of Personnel Performance, Training, and Qualifications Standards (PER Standards)
- Project 2016-EPR-02 Enhanced Periodic Review of Voltage and Reactive Standards (VAR Standards)

Projects with Regulatory Directives

Table 1, below, lists the current projects with regulatory directives. As of December 31, 2016, there were 11 standards-related directives to be resolved through standards development activities. (Not including non-standards related directives).

Table 1: Projects with Regulatory Directives		
Project	Regulatory	Regulatory
	Directives	Deadline
Project 2013-03 Geomagnetic Disturbance Mitigation	4	6/4/2018
Project 2015-09 Establish and Communicate System Operating Limits	2	N/A
Project 2015-10 Single Points of Failure	2	N/A
Project 2016-02 Modifications to CIP Standards (Revisions unrelated to	2	N/A
Definition of "Low Impact External Routable Connectivity")		
Project 2016-03 Cyber Security Supply Chain Management	1	9/27/2017

Regulatory Update

NERC Regulatory Update- Standards October 1, 2016 -December 31, 2016

NERC FILINGS TO FERC

FERC Docket No.	Filing Description	FERC Submittal Date
RM05-17-000, RM05-25-000, and RM06-16-000	Informational Filing of NERC of Reliability Standards Development Plan 2017-2019 NERC submits its 2017-2019 Reliability Standards Development Plan.	12/16/2016
RM15-14-002	Informational Filing of NERC - Plan to Address Supply Chain Risk Management Directive NERC submits an informational filing plan to address a FERC directive in Order No. 829 directing NERC to submit a new or modified Reliability Standard addressing supply chain risk management for industrial control system hardware, software, and computing and networking services associated with bulk electric system operations within one year of the effective date of the order, September 27, 2017.	12/15/2016
RD17-2-000	Petition of NERC for Approval of Interpretation of Reliability Standard CIP-002-5.1a NERC submits a petition for approval of a proposed interpretation of Reliability Standard CIP-002-5.1-Cyber Security-BES Cyber System Categorization.	11/28/2016
RM16-13-000	Comments of NERC in Response BAL-005 et. al NOPR NERC submits comments in response to Notice of Proposed Rulemaking (NOPR) to approve its petition on April 20, 2016, as supplemented on June 14, 2016, for two proposed Reliability Standards (BAL-005-1 - Balancing Authority Control and FAC-001-3 - Facility Interconnection Requirements), including three related definitions and the retirement of Reliability Standard (BAL-006-2 - Inadvertent Interchange (with one requirement proposed for consolidation with BAL-005-1)).	11/28/2016
RM16-10-000	Supplemental Information for Petition of NERC and WECC for Approval of Retirement of Regional Reliability Standard TOP-007-WECC-1a NERC submits a supplement to the March 23, 2016 joint petition filed with FERC requesting approval of the retirement of the Western Electricity Coordinating Council regional Reliability Standard TOP-007-WECC-1a-System Operating Limits.	11/16/2016
RR17-1-000	Petition of NERC for Approval of Amendments to the FRCC SDPM NERC submits a petition for approval of the revised Florida Reliability Coordinating Council, Inc. regional Reliability Standards Development Process Manual (SDPM).	11/10/2016
RD17-3-000	Joint Petition of NERC and WECC for Approval of Interpretation of Regional Reliability Standard BAL-002-WECC-2a NERC submits a joint petition with the Western Electricity Coordinating Council for approval of proposed interpretation of regional Reliability Standard BAL-002-WECC-2a.	11/9/2016

FERC Docket No.	Filing Description	FERC Submittal Date
RD16-6-000	Compliance Filing for Revisions to VRFs for Reliability Standards IRO-018-1 and TOP-010-1 NERC submits proposed revisions to the Violation Risk Factors ("VRFs") for Requirement R1 of Reliability Standard IRO-018-1 (Reliability Coordinator Real-time Reliability Monitoring and Analysis Capabilities) and Requirement R1 and R2 of Reliability Standard TOP-010-1 (Real-time Reliability Monitoring and Analysis Capabilities).	11/7/2016
RM13-11-000	2016 Informational Filing of NERC Regarding Frequency Response Annual Analysis NERC submits its 2016 Frequency Response Annual Analysis report for the administration and support of Reliability Standard BAL-003-1.1 (Frequency Response and Frequency Bias Setting).	10/21/2016
RM13-13-000	Informational Filing of NERC and WECC Regarding Regional Reliability Standard BAL-002-WECC-2 NERC and WECC submit an informational filing after the first two years of implementation of regional Reliability Standard BAL-002-WECC-02 (Contingency Reserve) that addresses the adequacy of contingency reserve in the Western Interconnection, in accordance with FERC Order No. 789.	10/3/2016

FERC ISSUANCES

(any standard development related directives or proposed directives are noted in the summary)

FERC Docket No.	Issuance Description	FERC Issuance Date
RD17-2-000	Letter Order Approving Interpretation of Reliability Standard CIP-002-5.1a FERC issues a delegated letter order approving an interpretation of Reliability Standard CIP-002-5.1-Cyber Security-BES Cyber System Categorization.	12/27/2016
RD16-6-001	Letter Order Approving Revisions to VRFs for IRO-018-1 and TOP-010-1 FERC issues a delegated letter order approving revisions to the Violation Risk Factors (VRFs) designations for Requirement R1 in Reliability Standard IRO-018-1 (Reliability Coordinator Real-time Reliability Monitoring and Analysis Capabilities) and Requirements R1 and R2 in Reliability Standard TOP-010-1 (Real-time Reliability Monitoring and Analysis Capabilities) from "medium" to high".	12/14/2016
RM16-6-000	Notice of Proposed Rulemaking on Essential Reliability Services and the Evolving Bulk-Power System -Primary Frequency Response FERC issues a Notice of Proposed Rulemaking (NOPR) proposing to revise its regulations to require all newly interconnecting large and small generating facilities, both synchronous and non-synchronous, to install and enable primary frequency response capability as a condition of interconnection.	11/18/2016

RM16-15-000 RM15-25-001	Order No. 833 on Regulations Implementing FAST Act Section 61003 – Critical Electric Infrastructure Security and Amending Critical Energy Infrastructure Information; Availability of Certain NERC Databases to the Commission FERC issues a final rule amending its regulations to implement provisions of the Fixing America's Surface Transportation Act that pertain to the designation, protection and sharing of Critical Electric Infrastructure Information.	11/17/2016
RR16-5-000	Letter Order Accepting Appendix 2, Appendix 5A, and Appendix 5B ROP Revisions FERC issues a letter order accepting NERC's August 15, 2016 filing of proposed revisions to its Appendix 2, Appendix 5A, and Appendix 5B of the NERC Rules of Procedure (ROP) to incorporate the terms Frequency response Sharing Group and Regulation Reserve Sharing Group in to the NERC ROP consistent with the terms as defined in the Glossary of Terms Used in NERC Reliability Standards and used in Reliability Standards BAL-00-1.1 and BAL-001-2.	11/4/2016
RD16-9-000	Letter Order Approving Reliability Standard COM-001-3 FERC issues a letter order approving Reliability Standard COM-001-3 (Communications).	10/28/2016

Standards Committee Report

Background

This report highlights some of the key activities of the Standards Committee during the fourth quarter of 2016.

2017-2019 Standards Committee Strategic Plan

The 2017-2019 Standards Committee Strategic Work Plan is presented with the understanding that the focus of standards development is on addressing a small number of Federal Energy Regulatory Commission directives, continuing with Periodic Reviews, and addressing emerging risks, including inputs from the Reliability Issues Steering Committee.

The Standards Committee Strategic Plan will be presented to the Board of Trustees at their February 9, 2017 meeting for approval.