Agenda
Member Representatives Committee
February 8, 2017 | 1:15 p.m. – 5:15 p.m. Pacific

Westin San Diego
400 West Broadway
San Diego, CA 92101

Conference Room: Emerald Ballroom (2nd Floor)

Introduction and Chair’s Remarks

NERC Antitrust Compliance Guidelines and Public Announcement*

Consent Agenda

1. Minutes* - (Approve)
   a. November 1, 2016 Meeting
   b. January 17, 2017 Conference Call
2. Future Meetings*

Agenda Items

3. Election of NERC Trustees* - (Elect)
4. Roadmap for Integrating Mexico into the ERO*
5. Responses to the Board’s Request for Policy Input*
   a. ERO Enterprise Strategic Planning Process*
   b. Next Steps for Distributed Energy Resources Task Force Final Report*
6. Additional Policy Discussion of Key Items from Board Committee Meetings*
   a. Finance and Audit Committee (February 2, 2017)
      i. Year-end Unaudited Statement of Activities for NERC and the Regional Entities
      ii. Investment Performance and Policy
   b. Corporate Governance and Human Resources Committee
      i. Board and Board Committees’ Self-Assessments and MRC Assessment of Board Effectiveness Results
      ii. Governance Guidelines
iii. Annual Conflict of Interest and Independence Requirements
iv. 2016 Year-End Performance Report
c. Compliance Committee
   i. Compliance Monitoring and Enforcement Program Annual Report
   ii. Coordinated Oversight Program Update
   iii. Internal Controls Evaluation Update
d. Standards Oversight and Technology Committee
   i. ERO Enterprise IT Application Strategy Update
   ii. Functional Model Update
   iii. Supply Chain Management Standard Update
   iv. Guidelines and Technical Basis Update
   v. Reliability Standards Quarterly Status Report

7. Update and Schedule of Near-Term Reliability Assessments*
8. Geomagnetic Disturbance Events Research Work Plan Update*
9. Inverter Disconnects During Transmission Disturbances*
10. Cyber Automated Information Sharing System (CAISS) Overview*
11. Update on FERC Reliability Matters*
12. Accountability Matrix*
13. Regulatory Update*

*Background materials included.
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.
Chair Nabil Hitti, with Vice Chair John Twitty present, called to order the North American Electric Reliability Corporation (NERC) Member Representatives Committee (MRC) meeting on November 1, 2016, at 1:02 p.m., Eastern. The meeting announcement, agenda, and list of MRC members in attendance are attached as Exhibits A, B and C, respectively.

Introduction and Chair’s Remarks
Mr. Hitti welcomed new MRC members and attendees, and acknowledged the attendance of the NERC Board of Trustees (Board), Commissioner Colette Honorable from the Federal Energy Regulatory Commission (FERC), David Ortiz and other staff from FERC, Liz Dalton from the Department of Energy (DOE), and State Commissioner Asim Haque.

Mr. Hitti recognized the MRC responses to the September 27, 2016, policy input request from Fred Gorbet, chairman of the Board. He reminded attendees that full presentations were conducted at the committee meetings and will not be repeated during the MRC meeting.

NERC Antitrust Compliance Guidelines and Public Announcement
Kristin Iwanecchko, committee secretary, called attention to the NERC antitrust compliance guidelines and the public meeting notice. Any questions should be addressed to NERC’s general counsel, Charles Berardesco.

Ms. Iwanecchko declared a quorum present with the following recognized proxies:

- Randy Crissman for Jacqueline Sargent – State/Municipal Utility
- Barry Lawson for Jay Bartlett – Cooperative Utility
- Fred Plett for Jacqueline Roberts – Small End-Use Electricity Customer
- Asim Haque for David Clark – State Government
- David Ortiz for Michael Bardee – U.S. Federal (non-voting)
- Liz Jones for Lane Lanford – Regional Entity (Texas RE – non-voting)
- Melanie Frye for Jim Robb – Regional Entity (WECC – non-voting)
Minutes
The MRC approved, on a motion by Jason Marshall and seconded by Fred Plett, the draft minutes of its August 10, 2016 meeting in Halifax and its October 4, 2016 conference call.

Election of MRC Officers for 2017
Mr. Hitti announced the nominations of John Twitty for chair and Jason Marshall for vice chair of the MRC for 2017. The MRC unanimously approved, on a motion by Fred Plett and seconded by Scott Helyer, Mr. Twitty as chair and Mr. Marshall as vice chair. Mr. Twitty and Mr. Marshall will assume their new positions at the start of the February 2017 MRC meeting in San Diego, CA.

MRC Sector Nominations and Elections Schedule
Mr. Hitti reminded attendees that the nomination period for the annual election of member representatives closes on Tuesday, November 8, 2016. The election will run from December 2, 2016, through December 12, 2016.

Reliability Issues Steering Committee (RISC) Nominations Schedule
Mr. Hitti noted that the RISC would be seeking nominations from November 16, 2016, through December 20, 2016, to fill open positions. The nominations will be evaluated by the RISC Nominating Committee in January and submitted to the Board for approval at its February 2017 meeting. He noted that there are two to three open positions for MRC members.

Update from the Board of Trustees Nominating Committee (BOTNC)
Ken Peterson, chair of the BOTNC, reported that the BOTNC held a conference call to consider a list of candidates to fill the upcoming Board vacancy and will be conducting interviews in November. The full report of the BOTNC will be sent to the MRC in December, with the election held at the February MRC meeting.

Responses to the Board’s Request for Policy Input
Mr. Hitti acknowledged the MRC’s responses to Fred Gorbet’s September 27, 2016, letter requesting policy input on the ERO Reliability Risk Priorities report and the 2017-2020 ERO Enterprise Strategic Plan and Metrics. The following comments on the policy input topics are not all inclusive, but provide the general tenor and scope of the discussion:

ERO Reliability Risk Priorities Report
Peter Brandien, chair of the RISC, provided an overview of the nine risk profiles identified in the 2016 ERO Reliability Risk Priorities report, which was being presented to the Board for acceptance the following day. Mr. Brandien thanked MRC members for the policy input received and noted that one identified area of confusion was around the high, medium, and low risk priorities, specifically what each meant and how they were assigned to the risk profiles. Mr. Brandien noted that the RISC would take the policy input into account as it moves forward with next year’s report.

- Mr. Hitti congratulated the RISC on a well-done report and noted his appreciation for the consideration of the policy input.
- Gerry Cauley, president and CEO of NERC, complimented the report.
2017-2020 ERO Enterprise Strategic Plan and Metrics
Mark Laub, senior vice president and chief reliability officer at NERC, providing an overview of the adjustments made to the strategic plan since the August meeting, which included: (1) refinement of the vision, mission, and core values and principles; (2) alignment of the contributing activities with the latest risk profile recommendations; (3) removal of the longer-term strategic planning considerations as the themes are captured in the risk profile recommendations; (4) enhancement of the ERO Enterprise reliability metrics; and (5) development of NERC performance metrics. Mr. Laub reviewed the five ERO Enterprise goals, six reliability metrics and four draft performance metrics, and provided a summary of the policy input received. He noted that the draft performance metrics were developed in response to comments from the August meeting, and management intends to present the final performance metrics to the Board for approval at its February meeting.

Mr. Laub stated that the ERO Enterprise will continue to strive for increased alignment among the strategic planning process, RISC activities, and business plan and development process. Going forward, the RISC report, strategic plan, and metrics would be updated every other year with the opportunity for interim updates to the RISC report and strategic plan based on identification of any significant new emerging risks or operational goals.

- With respect to goal 5, an MRC member questioned why the term “collaborative” was removed. Mr. Laub noted that the removal in the title was for streamlining purposes and does not diminish the focus on collaboration. The term is still included in the description of the goal.

- An MRC member asked whether historical data on the metrics would be available to industry. Mr. Laub noted that historical data would be provided around the February meeting.

- MRC members suggested having the MRC Business Plan and Budget Input Group review and provide input on the performance metrics.

Additional Policy Discussion of Key Items from Board Committee Meetings
Attendees did not have any additional comments in response to the discussions from the Corporate Governance and Human Resources Committee or the Finance and Audit Committee meetings. Attendees shared the following comments in response to the discussions at the Standards Oversight and Technology Committee and Compliance Committee meetings.

Standards Oversight and Technology Committee

- An attendee asked whether stakeholders will be involved with the technology solution being developed for the Compliance Monitoring and Enforcement Program. Stan Hoptroff, vice president and chief technology officer at NERC, stated that the steering committee is in the beginning stages and has not yet reached out to stakeholders, but would do so when appropriate.

- Mr. Cauley added that the ERO Enterprise is strategically focusing on core business processes to start and, in the longer-term, plans on developing a user interface available to the industry.

- An attendee recognized that all Order No. 693 directives have been addressed by NERC, industry, and the Regional Entities, and lauded this accomplishment.
An attendee asked whether there has been any further internal discussion at NERC regarding other tools or services for smaller entities or entities that are not participants in the CRISP program. Marc Sachs, senior vice president and chief security officer at NERC, referenced a pilot that would allow the E-ISAC to enhance its dissemination of technical information about cyber and physical attacks. Mr. Sachs encouraged smaller entities to volunteer to participate in the pilots. An overview of this effort will be provided at the February meeting.

Compliance Committee

An MRC member requested an update on the Critical Infrastructure Protection version 5 Reliability Standards implementation. Ken McIntyre, vice president of standards and compliance at NERC, stated that there has been an increase in alleged violations since the standards became effective, but that in his view it is too early to provide further comment on implementation by registered entities at this point. Mr. McIntyre stated that NERC would provide an update at the February 2017 quarterly meetings.

An attendee requested an update on the CIP-014 implementation. Mr. McIntyre noted that NERC conducted a survey and it appears that entities are well-engaged and meeting the intent of the standard, with some are going above and beyond.

An attendee identified confusion between Implementation Guidance and the Guidelines and Technical Basis section in Reliability Standards. He noted that the confusion appears to have resulted from a presentation at a recent Standards Committee meeting. Mr. McIntyre clarified that the purpose of the Guidelines and Technical Basis is to help industry understand the standard drafting team’s intent when drafting the requirements and is not the basis for determining compliance. He added that, if there are any compliance approaches included in, or proposed to be included in, the Guidelines and Technical Basis, those approaches should be proposed for Implementation Guidance. Further, Mr. McIntyre noted that NERC would clarify the intent of the Guidelines and Technical Basis with industry and work to resolve any confusion that resulted from the recent Standards Committee meeting.

An MRC member asked how currently approved guidance documents are handled when a standard version is retired. Mr. McIntyre stated that this is something that will be determined.

2016 Long-Term Reliability Assessment

John Moura, director of reliability assessment and system analysis at NERC, provided an overview of the 2016 Long-Term Reliability Assessment which is conducted annually per NERC’s Rules of Procedure and is a 10-year outlook of issues that may impact reliability. He reviewed the key findings of the assessment which anticipates adequate resources, transmission, and fuel supply. He reviewed the timeline, noting that the draft assessment was shared with the MRC the previous week and the Planning Committee (PC) will vote to accept the assessment later in November. The 2016 Long-Term Reliability Assessment will be presented to the Board in December and is anticipated to be released on December 15.
2016-17 Winter Reliability Assessment
Mr. Moura provided an overview of the 2016-17 Winter Reliability Assessment, which has shifted to a more condensed, data-focused report but with the same coordination that was done with the former report. He reviewed the key findings which anticipate adequate fuel supply and transmission system reliability. Further, for most areas total internal demand has remained flat or decreased. Mr. Moura also provided an example of a dashboard included in the winter assessment. He reviewed the timeline, noting that while the process has changed so that NERC senior management approves seasonal assessments for publication, the assessment will be sent to the Board and MRC for information on November 7 and is anticipated to be released on November 15.

Special Assessment: Distributed Energy Resources Task Force (DERTF) Panel
Mr. Moura introduced and moderated a panel consisting of five DERTF members, being Mark Ahlstrom, Brian Evans-Mongeon, Todd Lucas, Rich Hydzik, and Lorenzo Kristov. Mr. Moura noted that the DERTF was formed in response to the Essential Reliability Services Task Force (ERSTF) recommendations to investigate the implications of how to accommodate high levels of distributed energy resources (DERs). The DERTF is producing a final report with the operational and planning considerations.

Mr. Ahlstrom, vice president of renewable energy policy for NextEra Energy Resources and WindLogics, presented a summary of the DERTF report and reviewed the recommendations, noting that the scope of the DERTF was to study operational and planning impacts, particularly on the operational impacts that have high penetrations, as well as review existing NERC Reliability Standards and the Institute of Electrical and Electronics Engineers (IEEE) 1547 standard to determine whether any adjustments are needed.

Mr. Evans-Mongeon, president and CEO of Utility Services, Inc., provided an overview of the DER definition, noting that the intent is not to establish a definition for the NERC glossary, but to provide general information on the definition of DERs. He noted that the definition included in chapter 1 of the report does not extend the BES definition or applicability. Mr. Evans-Mongeon also noted that with respect to behind-the-meter generation, it only includes the behind-the-meter generation that exists within the distribution footprint.

Mr. Lucas, general manager of bulk power operations at Southern Company Services, stated that the DERTF conducted an extensive review of existing standards and determined that current standards already require planners and operators to incorporate any information they need to make sure they are ensuring reliability. Therefore, the DERTF is not recommending new standards; however, the DERTF is recommending a change to MOD-032 to add Distribution Providers (DP). Mr. Lucas also noted that the Functional Model is currently under revision and the current redline version includes edits on DER. The DERTF believes that the proposed revisions are appropriate and is not recommending additional changes.

Mr. Hydzik, senior transmission operations engineer at Avista, discussed the modeling of DERs from a planning and operations perspective. He noted that modeling became an issue during discussions on IEEE 1547 and is important because DERs do not currently appear in the current model. Mr. Hydzik suggested that a model should be developed that explicitly models DERs.
Mr. Kristov, principal, market and infrastructure policy at California Independent System Operator (CAISO), discussed exchanging information and data for reliably modeling the transmission and distribution interface. He stated that the adoption of DERs is driven from the bottom up and is important due to the changing market of customers. He also noted that the challenge seen by CAISO is the need to redefine how the DP and Independent System Operator coordinate operations and information exchanges to facilitate expansion of resources in a reliable and fair manner.

- Mr. Cauley asked whether the DERTF looked at experiences in Hawaii and Europe in terms of formulating potential risk to reliability. Mr. Ahlstrom stated that it was considered, but believes Hawaii is a different case since it is an island system. Mr. Evans-Mongeon added that Europe has a different model so it is not a one-for-one examination, but worth looking at how they have dealt with similar scenarios.

- Mr. Cauley asked whether the DERTF believes the transmission grid would continue to be the provider of essential reliability services (ERS) or whether there would be obligations for distribution resources to actively support reliability and supply some level of ERS. Mr. Lucas stated that it could be different depending on the part of country and the kind of penetration level.

- Fred Gorbet, chair of the Board, asked how the DERTF report would be disseminated and communicated based on different audiences to ensure the technical issues resonate. Mr. Evans-Mongeon stated that the DERTF has included policymakers in discussions to make sure they are involved. Mr. Moura added that the group can also consider an abstract or videos, similar to what was done for the ERSTF report.

- An MRC member asked when the report is being released. Mr. Evans-Mongeon noted that the report is being reviewed by the Operating Committee and PC for approval in December. The final report is expected to be presented to the Board for acceptance at the February meeting.

Special Assessment: Single Point of Disruption on Natural Gas Infrastructure
Mr. Moura noted that NERC put together an advisory group and has engaged with gas associations to develop the scope for this assessment. He stated that the purpose of this special assessment is to understand the impetus of the Aliso Canyon storage leak and whether there are other similar single points of disruption. Mr. Moura also noted that the target audience of the assessment are policymakers and to provide general awareness for system planners and operators. He reviewed the trends and the proposed four-phase development approach.

- A Board member asked whether there are elements of this analysis that need to be confidential. Mr. Moura stated that there are aspects that will need to be confidential and the advisory group is signing non-disclosure agreements.

Update on FERC Reliability Matters
David Ortiz, deputy director of the Office of Electric Reliability at FERC, provided an overview of several FERC reliability activities.
Reliability Standard for Transmission System Planned Performance for Geomagnetic Disturbance (GMD) Events
Mr. Ortiz noted that Order No. 830 was issued approving TPL-007-1, but directed modifications. Specifically, the order directs the following: (1) modify the benchmark GMD definition; (2) modify Requirement R6; (3) require responsible entities to collect geomagnetically induced currents (GIC) monitoring and magnetometer data as necessary to enable model validation and situational awareness; and (4) provide deadlines for Corrective Action Plans and completion of any non-hardware and hardware solutions in those plans. Mr. Ortiz added that the order requires NERC to submit the revisions within 18 months of the effective date of Order No. 830. Further, NERC must develop a research plan covering the following topics: (1) area of which spatial averaging should be calculated; (2) earth conductivity models; (3) latitude-scaling factors; (4) aspects of the required thermal impact assessments; and (5) any other areas that may impact the development of new or modified GMD Reliability Standards. Data collected as part of this must be made public and NERC must submit the work plan May 29, 2017.

Reliability Standards for Balancing Authority Control and Facility Interconnection Requirements
Mr. Ortiz noted that a Notice of Proposed Rulemaking (NOPR) was issued on September 22, 2016 proposing to approve BAL-005-1 and FAC-001-3, as well as the retirement of BAL-005-0.2b, FAC-001-2, and BAL-006-2. FERC also requested additional information regarding proposed retirement of Requirement R15 of BAL-005-0.2b, requiring responsible entities to maintain and periodically test backup power supplies at primary control centers and other critical locations.

Reliability Standards for Reliability Coordinator Real-time Reliability Monitoring and Analysis Capabilities and Real-time Reliability Monitoring and Analysis Capabilities
Mr. Ortiz noted that an order was issued on September 22, 2016 approving IRO-018-1 and TOP-010-1, which address real-time reliability monitoring and analysis capabilities of reliability coordinators, balancing authorities, and transmission operators.

Accountability Matrix
Ms. Iwanechko invited questions or comments regarding the accountability matrix included in the MRC agenda package, which is updated quarterly and captures key action items from the quarterly MRC and Board meetings and the policy input letter responses.

Regulatory Update
Mr. Berardesco invited questions or comments regarding the regulatory report, which highlights Canadian and Mexican affairs, as well as past and future significant FERC filings.

Future Meetings
The following are future dates for the MRC Pre-Meeting and Informational Sessions:

- January 17, 2017
- April 6, 2017
- July 12, 2017
• October 4, 2017

The following are future NERC Board and MRC meetings dates and locations:
• February 8-9, 2017 – San Diego, CA
• May 10-11, 2017 – St. Louis, MO
• August 9-10, 2017 – Ottawa, Canada
• November 8-9, 2017 – New Orleans, LA

**Adjournment**
There being no further business, the meeting terminated at 4:34 p.m., Eastern.

Submitted by,

Kristin Iwanechko
Secretary
Draft Minutes
Member Representatives Committee
Pre-Meeting Informational Session
Conference Call and Webinar
January 17, 2017 | 11:00 a.m. – 12:00 p.m. Eastern

Introduction and Chair’s Remarks
Chair Nabil Hitti, with Vice Chair John Twitty present, convened a duly-noticed open meeting by conference call and webinar of the North American Electric Reliability Corporation (NERC) Member Representatives Committee (MRC) on January 17, 2017, at 11:02 a.m., Eastern. The meeting provided the MRC and other stakeholders an opportunity to preview proposed agenda topics for the MRC, Board of Trustees (Board) and Board Committee meetings scheduled to be held February 8-9, 2017, in San Diego, California. The meeting announcement and agenda are attached as Exhibits A and B, respectively.

NERC Antitrust Compliance Guidelines and Public Announcement
Kristin Iwanescho, committee secretary, directed the participants’ attention to the NERC Antitrust Compliance Guidelines and the public meeting notice included in the agenda.

Schedule of Quarterly NERC Meetings and Conference Calls
The draft schedule of events for the upcoming meetings in San Diego was included in the agenda package.

Review of Proposed Board and Board Committees Meeting Agenda Items
Charlie Berardesco reviewed the preliminary agenda items for the Board and Board Committee meetings scheduled for February 8-9, 2017, in San Diego, as well as those scheduled for conference calls prior to the February meetings, identified in the slide presentation included in the informational session agenda package (Exhibit C). Mr. Hitti encouraged MRC members to review all agenda materials for the Board and Board Committee meetings, once posted and available on January 25, 2017, and attend as many of these meetings as possible, in advance of the MRC’s meeting on February 8, 2017.

Review of Proposed MRC Agenda Items for February 8
Mr. Hitti reviewed the preliminary MRC agenda items for the upcoming February 8, 2017, meeting in San Diego identified in the slide presentation included in the informational session agenda package (Exhibit C). Topics include:

- Election of NERC Trustees;
- Roadmap for integrating Mexico into the ERO;
- Discussion of the responses submitted to the policy input request from the Board;
• Additional discussion of the issues presented at the Board Committee meetings on February 2 and 8;
• Update and schedule of near-term reliability assessments;
• Geomagnetic disturbance events research work plan update;
• Inverter disconnect during transmission disturbances;
• Cyber Automated Information Sharing System (CAISS) overview;
• Update on FERC reliability matters;
• Accountability matrix; and
• Regulatory update.

Policy Input Reminder
Mr. Hitti announced that the Board’s request for policy input was released on January 10, 2017, and responses are due by Tuesday, January 31, 2017, to Ms. Iwanechko. NERC staff provided updates on the following topics included in the policy input letter:
  • ERO Enterprise Strategic Planning Schedule; and
  • Next Steps for Distributed Energy Resources Task Force Final Report.

Proxy Reminder
Proxy notifications for the February 8, 2017, meeting must be submitted in writing to Ms. Iwanechko.

Meeting Adjourned
There being no further business, the call was terminated at 11:46 p.m., Eastern.

Submitted by,

Kristin Iwanechko
Secretary
Future Meetings

Action
Information

Summary
The following are the future meeting dates for 2017. The dates for the 2017 pre-meeting and informational webinars are also included below.

2017 Dates
April 13 Pre-Meeting and Informational Session
May 10-11 St. Louis, MO
July 12 Pre-Meeting and Informational Session
August 9-10 Ottawa, Canada
October 12 Pre-Meeting and Informational Session
November 8-9 New Orleans, LA
Election of NERC Trustees

**Action**
Elec four NERC Board of Trustees (Board) as Class of 2020 (with three-year terms).

**Background**
Election of the trustees of the Corporation is governed by Sections 5 and 6 of Article III of the Bylaws. The details are provided in the attached report. Ken Peterson, chair of the Board’s Nominating Committee, will present the enclosed report.

**Attachment**
1. Report of the Nominating Committee to the Member Representatives Committee
Report of the Board of Trustees
Nominating Committee to the
Member Representatives Committee
December 14, 2016

The Nominating Committee of the Board of Trustees for the North American Electric Reliability Corporation (NERC) recommends the following nominees for election to the NERC Board of Trustees at the Annual Meeting of the Member Representatives Committee (MRC) on February 8, 2017:

Class of 2020 (three-year terms):  Janice B. Case
                                     Frederick W. Gorbet
                                     Deborah S. Parker
                                     Roy Thilly

This report includes a brief biography of each nominee.

Members of the Nominating Committee
The Nominating Committee consists of independent NERC Trustees Kenneth Peterson (Committee Chair), Robert Clarke, Kenneth DeFontes, David Goulding, George Hawkins and Jan Schori, as well as MRC members Nabil Hitti (MRC Chair), John Twitty (MRC Vice Chair), Anthony Montoya, Michelle D’Antuono, and Nelson Peeler.

Background
Article III of NERC’s Bylaws establishes the qualifications and sets the nomination and election procedures for members of NERC’s Board of Trustees. NERC’s independent trustees serve staggered three-year terms, and an election of trustees occurs at the Annual Meeting of the MRC each year. All independent trustees are to be elected from nominees proposed by the Nominating Committee. A nominee shall be elected an independent trustee if such person receives the affirmative vote of two-thirds of the members of the MRC. Each nominee receiving the necessary two-thirds vote of the MRC shall take office immediately upon election.

The incumbent trustees whose terms expire at the February 2017 Annual Meeting are Paul Barber, Janice B. Case, Frederick W. Gorbet and Roy Thilly. NERC’s trustee succession policy, more fully discussed below, provides that no independent trustee may be re-nominated or re-elected if he or she has served 12 consecutive years as an independent trustee. As a result of the application of the policy, Mr. Barber is not seeking re-election.

Committee Process
The Nominating Committee is required to present four nominees for election at the February 2017 MRC meeting. The Committee was pleased to learn that each of Ms. Case and Messrs. Gorbet and Thilly was willing and interested to serve an additional term. Committee members solicited the views of
stakeholders on each of Ms. Case and Messrs. Gorbet and Thilly and reviewed their performance. Based on stakeholder input and the Committee’s own views, the Committee determined that each of Ms. Case Messrs. Gorbet and Thilly was well-qualified to continue to serve and should be re-nominated.

The Committee retained the services of the board and executive search firm Russell Reynolds Associates (RRA) to assist in the search and evaluation of candidates to fill the open trustee position. As directed by the Bylaws, the Nominating Committee provided an opportunity for stakeholders to suggest trustee candidates. The Committee received many excellent suggestions and, working with RRA, was pleased to have an excellent list of candidates from which to choose. With the assistance of RRA, the Committee reviewed the background of each candidate, screened the candidates for possible conflicts of interest, and interviewed four candidates. In developing its approach to fill the open trustee position, the Committee noted the attributes each of the current members of the Board of Trustees bring to the Board.

The Nominating Committee unanimously recommends the four nominees submitted in this report for election to the NERC Board of Trustees for three-year terms ending at the February 2020 annual meeting of the MRC. With respect to the nominee to fill the open trustee position, Deborah S. Parker, the Committee particularly notes her broad industrial background, including her executive service at Alstom, Ltd. and Ford Motor Company, and her prior service on the boards of directors of both an electric and gas utility holding company, NiSource Inc. and a gas pipeline company, Columbia Pipeline Group, Inc.

**Trustee Succession**

The Board of Trustees has adopted a policy statement on trustee succession as set forth in the NERC Governance Guidelines, and the Nominating Committee has followed that policy in making the nominations. The policy statement directs the Nominating Committee to observe the following guidelines in proposing nominees to serve as independent trustees:

- Each year the Nominating Committee should include in its report to the Member Representatives Committee a calculation of the average tenure of the independent trustees. The Nominating Committee should endeavor to keep the average tenure of independent trustees below six years.  
  
1 The calculations also include service on the board of the North American Electric Reliability Council.

- To the extent feasible, the Nominating Committee should determine prior to soliciting suggestions for candidates whether the Committee expects that one or more incumbent trustees will not be re-nominated.

- No independent trustee may be re-nominated or reappointed after he or she has served on the board for twelve consecutive years, unless at least one year has elapsed between the end of service on the board and the subsequent re-nomination or reappointment.

As of February 2017, the incumbent nominees will have the following years of service on the NERC Board:

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<th>Trustee</th>
<th>Years</th>
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<tbody>
<tr>
<td>Janice B. Case</td>
<td>9</td>
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<td>Frederick W. Gorbet</td>
<td>11</td>
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<td>Roy Thilly</td>
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Assuming the election of the nominees, as of February 2017 the average tenure of all independent trustees would be 5.9 years.

**Biographies of the Nominees**

**Janice B. Case**

Janice B. Case was elected to the NERC Board of Trustees. Ms. Case is the chair of the Compliance Committee and also serves on the Finance and Audit Committee. She previously served as vice chair of the Board of Trustees and on the Electricity Sub-Sector Coordinating Council.

Mrs. Case was employed by Florida Power Corporation/Florida Progress Corporation for nearly 25 years in a series of increasingly responsible management positions. Her executive level roles included five years as senior vice president reporting to the CEO and chair of the Board, a member of the Senior Strategic Leadership Team, and the head of the Energy Solutions Strategic Business Unit. In that role, she was responsible for the company’s 1.3 million residential, commercial, and industrial customers. For the six years prior to that, she was vice president of the Suncoast Florida Region with distribution operating responsibility for the two most populated counties of the FPC service territory. She served her company and industry in national and state leadership roles on EEI, EPRI, the Marketing Executive Committee, and Florida’s Conservation Steering Group Committee.

Since leaving full-time corporate employment, Mrs. Case has served on numerous corporate and not-for-profit boards. She served for four years as chair of the Board of Cadence Network Inc., a company formed by a joint venture between Florida Progress, Xcel Energy, and Cinergy (Duke), and then sold to Advantage IQ, Inc. From 2001 to 2007, she served on the Board of Directors of Central Vermont Public Service Corporation, an investor-owned electric transmission and distribution utility that provided energy and energy-related services to customers throughout Vermont. From 2002 to 2008, Mrs. Case served as a non-affiliated director of the Western Electricity Coordinating Council, one of eight regional entities with delegated authority from NERC. She served as the chair of the Human Resources and Compensation Committee of the WECC Board from its inception in 2002 and served on the 2007 Strategic Planning Committee. Mrs. Case also served for six years as a director and trustee for three mutual funds managed by Aegon/Transamerica Fund Advisors, Inc.

In addition to NERC, she currently serves as an independent director and trustee of the Thrivent Mutual Funds, the Thrivent Financial Securities Lending Trust, and the Thrivent Series Fund, Inc., where she serves as chair of Corporate Governance for all three entities, in addition to serving on the Contracts Committee, the Audit Committee, the Ethics and Compliance Committee, and the Investment Committee.

Mrs. Case earned a bachelor’s degree in Economics from Rhodes College and a master’s degree in Finance from the University of Mississippi.

**Frederick W. Gorbet**

Frederick W. Gorbet was elected to the NERC Board of Trustees in February 2006 and was elected chair of the Board of Trustees in February 2013. Mr. Gorbet also serves as an ex officio member on the Corporate Governance and Human Resources, Enterprise-wide Risk, Compliance, and Finance and Audit Committees. Mr. Gorbet previously served as vice chair of the Board of Trustees.
Mr. Gorbet has extensive experience in public policy advice and formulation, particularly with regard to financial institutions and energy policy. During a 25-year career in the Canadian public service, he served as senior policy advisor to the Department of Energy, director of policy for the International Energy Agency in Paris, associate secretary to the Cabinet for Strategic Policy, and deputy minister of finance.

After leaving the public service, Mr. Gorbet held senior executive positions in the life insurance industry. He served as executive director of the MacKay Task Force on the future of the Financial Services Sector of Canada, as executive director of the Saucier Task Force on Corporate Governance, as senior policy advisor to Credit Union Central of Canada on the National Initiative, and as the founding chair of the Market Surveillance Panel for administered electricity markets in Ontario. He was also a faculty member at the Schulich School of Business at York University from 1999 to 2013. During this time he held the CIT chair in Financial Services (2002–2011) and was director of the Financial Services Program.

Mr. Gorbet has served on a number of Boards of Directors in the private and not-for-profit sectors, most recently as chair of the Board of Directors of Assuris and vice chair of the Government of Canada Audit Committee. He is currently a director of LAWPRO (Lawyer’s Professional Indemnity Company), where he chairs the Audit Committee.

Mr. Gorbet’s most recent public policy assignment was to chair the Automobile Insurance Anti-Fraud Task Force, which was appointed in July 2011 by the minister of finance for Ontario and reported in November of 2012.

Mr. Gorbet has a bachelor’s degree from York University and a doctorate in Economics from Duke University. He is a member of the Advisory Council to the Dean of the Schulich School of Business and an Honorary Governor of York University.

He was appointed to the Order of Canada in 2000.

Deborah S. Parker
Deborah S. Parker is President and Chief Executive Officer of International Business Solutions, which provides consulting services to all phases of strategic business process management. She was Senior Vice President, Quality and Environment, Health and Safety, of Alstom, Ltd., and served as a senior executive with the Ford Motor Company in several positions, including Corporate Officer and Vice President, Global Quality and Chief Executive Officer and Group Managing Director of Ford’s South African operations. Ms. Parker also served as Executive Vice President and Chief Operations Officer of the National Urban League.

Ms. Parker’s prior board service includes serving as a member of the boards of directors of NiSource Inc. and of Columbia Pipeline Group, Inc.

Ms. Parker earned a bachelor’s degree from Southern Illinois University, a master of arts from Washington University and a master in business administration from Baker College.
Roy Thilly

Roy Thilly was elected to the NERC Board of Trustees in February 2011 and was elected vice chair and chair-elect in February 2016. Mr. Thilly serves on the Corporate Governance and Human Resources Committee as well as the Compliance Committee.

Mr. Thilly served as president and chief executive officer with WPPI Energy from January 1, 1992, to January 31, 2011. WPPI Energy is a bulk power utility with 51 municipal utility member systems located in Wisconsin, Iowa, and Michigan. He also served from 2001 through 2010 on the Board of Directors of the American Transmission Company.

Before joining WPPI Energy, Mr. Thilly was a partner in the Madison law firm of Boardman, Suhr, Curry, and Field, where he represented municipal utilities from several states and other clients before the Federal Energy Regulatory Commission and in power supply negotiations and general litigation.

A native of New York, Mr. Thilly completed his bachelor's degree in English at Columbia University in 1968. For the following three years, he served as a Peace Corps volunteer in the Philippines. Mr. Thilly graduated magna cum laude from the University of Wisconsin Law School in 1974.

Mr. Thilly has been active on national and state electric issues for many years. He previously served on NERC’s Board from 1991–2002. From 2011 to 2013, he chaired the Stakeholder Steering Committee of the Eastern Interconnection Planning Collaborative, on behalf of the U.S. Department of Energy, helping to oversee the development of an interconnection-wide transmission planning process. In 2014, the secretary of energy appointed Mr. Thilly to the Department of Energy's Electric Advisory Committee.

Mr. Thilly is a past president of the American Public Power Association and of the Mid-Continent Area Power Pool (MAPP) and a past member of the Board of Directors of the Midwest Reliability Organization. From 1992 through 2010, he served as chair of the Transmission Access Policy Study Group (TAPS), a national organization of transmission-dependent utilities that promotes equal access and competition in electricity at wholesale.

On the state level, Mr. Thilly served as co-chair of the Wisconsin Governor's Task Force on Global Warming in 2007 and 2008. In 2004, he served on the Governor's Task Force on Energy Efficiency and Renewables. He is currently chair of Gathering Waters Conservancy, Wisconsin’s alliance of land trusts and a member of the finance and endowment committees of the Door County Land Trust.
Roadmap for Integrating Mexico into the ERO

Action
Discussion

Background
Because the North American bulk power system spans three countries, the reliability of the interconnected system requires cross-border cooperation and collaboration. In 2005, the U.S. Energy Policy Act of 2005 was enacted, amending the Federal Power Act and charging the Federal Energy Regulatory Commission (FERC) with certifying an organization as the ERO.¹ This legislation also recognized the need for continent-wide cooperation on electric reliability regulation by requiring that FERC certify as the ERO an organization whose governing documents compel it to seek similar recognition from authorities in Canada and Mexico.

Anticipating enactment of this legislation, a bilateral group of U.S. and Canadian federal and Canadian provincial government representatives developed a set of principles to guide the formation of the international ERO. These principles were filed with FERC for information.² In 2006, FERC certified NERC as the international ERO.

NERC has received recognition through legislation, regulation, or agreement in each of the eight interconnected Canadian provinces, each of which has adopted a mandatory reliability regulatory framework that is based on NERC Reliability Standards and the collaborative work that takes place under the institutional framework of the international ERO.

Developments in Mexico
In 2013 and 2014, the Mexican legislature enacted comprehensive energy reforms that provide the Mexican Energy Regulatory Commission (CRE), authority to implement a mandatory regulatory regime for reliability. Mexico has made steady progress implementing the reforms. Staff and senior management from NERC, the Western Electricity Coordinating Council (WECC) and the appropriate authorities in Mexico have been working together to lay the groundwork for Mexican participation in the ERO at a time when such participation is appropriate for Mexico.

Discussions among leaders from the three North American leaders at the June 2016 North American Leaders Summit led to the following commitment:

*Building on the U.S.-Canadian experience, Mexico and the United States have initiated discussions to explore a similar conceptual model for deepened bilateral electric*

reliability cooperation. This cooperation is a critical step towards establishing a shared trilateral vision for electricity reliability in North America.³

On January 7, 2017, representatives of the U.S. and Mexican governments signed a set of bilateral reliability principles that are supportive of the international ERO framework.⁴ NERC and representatives of CRE and the Mexican system and market operator, the National Energy Control Center (CENACE), have been working together to develop a memorandum of understanding (MOU) that will signal the commitment of all parties to work toward inclusion of Mexico in the ERO.

NERC staff will provide an overview of the provisions of the MOU and a high-level outline of the steps required to facilitate Mexico participation in the ERO in a manner consistent with other North American jurisdictions and on a schedule that comports with Mexico’s schedule for implementing its reforms.


Responses to the Board’s Request for Policy Input

Action
Discussion

Background
The policy input letter is issued by the Chair of the NERC Board of Trustees (Board) four to five weeks in advance of the quarterly meetings and includes relevant materials necessary to inform discussion. Written input from the Member Representatives Committee (MRC) and stakeholders is due three weeks after issuance and is then revisited during a dedicated discussion time on the MRC’s agenda, in the presence of the Board.

Summary
On February 8, 2017, the MRC can expect presentations with additional information on the two policy input items at the MRC meeting: (1) ERO Enterprise strategic planning process; and (2) next steps for the Distributed Energy Resources Task Force (DERTF) final report. The MRC can expect to participate in further discussion of the responses received to the policy input request that was distributed on January 10, 2017, and of the presentations given on the policy input items at the MRC meeting.

The items included in the policy input letter were presented at the MRC Pre-Meeting and Informational Session webinar on January 17, 2017. Additional background information on each of the policy input items are included in the agenda package for the webinar.

Deadline for submitting policy input responses is January 31, 2017, and should be sent to Kristin.Iwanechko@nerc.net.

Attachment
1. January 10, 2017, Board’s Letter Requesting Policy Input (without attachment)

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1 While the attachment to the policy input letter, the DERTF final report, is not included in the MRC agenda package, it is included in the February 9 Board agenda package for approval.
January 10, 2017

Mr. Nabil Hitti, Chair
NERC Member Representatives Committee

Dear Nabil:

I invite the Member Representatives Committee (MRC) to provide policy input on two issues of particular interest to the NERC Board of Trustees (Board) as it prepares for its February 8-9, 2017, meetings in San Diego, California. Additional background information is included in the January 17, 2017 MRC Informational Session agenda package to help MRC members solicit inputs from their sectors. As a reminder, please include a summary of your comments in your response (i.e., a bulleted list of key points) for NERC to compile into a single summary document to be provided to the Board for reference.

Item 1: ERO Enterprise Strategic Planning Process
During the November 1, 2016 MRC meeting and further described in the January 17, 2017, MRC Informational Session agenda package, management outlined ongoing efforts to enhance the ERO Enterprise strategic planning process and supporting activities. As part of these efforts, in 2017, the ERO Enterprise intends to develop a longer-term (beyond five years) strategy, which would provide a long-term framework for the ERO Enterprise’s goals and related areas of focus. The current ERO Enterprise Strategic Plan and Metrics will be renamed as the ERO Enterprise Operational Plan and, together with the set of multi-year metrics, will support this longer-term strategy. The ERO Enterprise Operational Plan and metrics would continue to address near-term operating priorities, aligning with the Reliability Issues Steering Committee (RISC) activities and the development of annual business plans and budgets (BP&B) for NERC and the Regional Entities.

The ERO Enterprise Operational Plan and metrics would continue to be developed using: (1) the risk profiles and recommendations identified in the RISC’s 2017 ERO Reliability Risk Priorities report (RISC report); (2) NERC and Regional Entity Board input; and (3) stakeholder input. In a shift from previous years, the RISC report will be finalized for Board approval in August to better inform the ERO Enterprise Operational Plan, metrics, and BP&B. Additionally, starting in 2017, the development of the RISC report, ERO Enterprise Operational Plan, and metrics would be undertaken every two years, with the opportunity to make interim updates based on identification of any significant new emerging risks or operational goals. The metrics are intended to be more stable and enduring. As such, they would be tracked over a multi-year period, with supporting measures, thresholds, and targets reviewed and approved annually by the Board. The schedule for 2017 combines the activities for strategic and operational planning (see highlighted activities), and business plan and budget (BP&B) development and includes touchpoints for
stakeholder input throughout the year. The Board requests MRC policy input on the strategic planning process and its supporting activities. Specifically:

1. What should the scope of the proposed longer-term strategy include?
2. Do you agree with updating the RISC Report, ERO Enterprise Operational Plan, and metrics every two years versus annually?
3. Are there improvements the RISC should consider in the development of the RISC report?
4. Are there specific improvements the ERO Enterprise should consider in the development of updates to the ERO Enterprise Operational Plan?
5. Does the 2017 schedule provide adequate opportunity for stakeholder input into the strategic planning process?

Item 2: Next Steps for Distributed Energy Resources Task Force (DERTF) Final Report
The DERTF was established in response to recommendations from the Essential Reliability Services Task Force (ERSTF) Measures Framework Report. The DERTF developed a report (Attachment A) focused on operational and planning considerations from integrating significant amounts of Distributed Energy Resources (DER) while examining the potential implications to bulk power system (BPS) reliability. In developing this report, the task force reviewed the NERC Functional Model, existing NERC Reliability Standards, and coordinated with the efforts to enhance the Institute of Electrical Engineers (IEEE) 1547 standard for Interconnecting Distributed Resources with Electric Power Systems. The DERTF recommended several actions in the report that should be prioritized, including (1) enhancements to NERC Reliability Standards; (2) guideline development by the technical committees; (3) model improvements; and (4) increased attention in assessments, monitoring, and reliability studies. The Board requests MRC policy input regarding how and at what pace NERC should respond to the recommendations, based on the findings identified in the DERTF report.

The full agenda packages for the Board, Board Committees and MRC meetings will be available on January 25, 2017. I encourage the MRC to review the agenda materials for the February 2017 Board and MRC meetings and offer any additional input that is meaningful and timely to industry and stakeholders.

Written comments should be sent to Kristin Iwanechko, MRC Secretary (Kristin.Iwanechko@nerc.net) by January 31, 2017, for the Board to review in advance of the meetings scheduled for San Diego.

Sincerely,

Fred W. Gorbet, Chair
NERC Board of Trustees

cc: NERC Board of Trustees
    Member Representatives Committee
ERO Enterprise Strategic Planning Process

Action
Discussion

Summary
In 2016, the ERO Enterprise strategic planning documents were consolidated and integrated, aligning the linkages among the goals, metrics, and Reliability Issues Steering Committee’s (RISC) risk priorities. During the November 2016 Board of Trustees (Board) meeting, the ERO Enterprise Strategic Plan and Metrics 2017–2020 was approved, which contains the following components:

- ERO Enterprise vision, mission, and values;
- Five ERO Enterprise goals and their contributing activities for the next three years;
- Six enduring ERO Enterprise metrics, focused on measuring progress on reliability improvement (each metric’s measure of success, threshold, and target is adjusted annually as needed); and
- The risk profiles and recommendations from the RISC’s current ERO Reliability Priorities report (RISC report).

An initial draft of NERC performance metrics were also shared during the November Board meetings. Since that meeting, these metrics have been revised to be a single metric, with four supporting measures focused on NERC efficiency and effectiveness. This efficiency and effectiveness metric will be added as a seventh metric to the ERO Enterprise Strategic Plan and Metrics 2017–2020 once approved by the Board during their February 2017 meeting. The measures and their thresholds and targets will also be adjusted annually as needed.

Also during the November meetings, an approach to begin in 2017 was reviewed with the Member Representatives Committee (MRC) that increases the alignment between the timing of the production of the annual business plan and budget (BP&B) and evaluation of the strategic plan and metrics as follows:

- Remove the year designation from the ERO Enterprise Strategic Plan and Metrics (e.g., 2018–2021) and move to an every-other-year review cycle.
- Risk prioritization and strategic plan and metrics revisions would occur every two years, starting with 2017, with the opportunity to make interim updates based on identification of any significant new emerging risks or operational goals.
- Annual BP&B development is always based on latest strategic plan and metrics.

Additionally, in 2017, the ERO Enterprise will develop a long-term strategy (beyond five years) for the ERO Enterprise. As part of this effort, the ERO Enterprise Strategic Plan and Metrics document would be referred to as the ERO Enterprise Operational Plan. The long-term strategy would provide a long-term framework for the ERO Enterprise’s goals and related areas of focus,
while the ERO Enterprise Operational Plan, together, with the set of multi-year metrics, would continue to address near-term operating priorities. The ERO Enterprise Operational Plan, as noted above, will be revised every other year, aligning with the RISC activities and BP&B development. The metrics, which are intended to be more stable and enduring would be tracked over a multi-year period, with supporting measures, thresholds, and targets reviewed and approved annually by the Board.

The schedule for developing the 2018 BP&B in 2017 has been expanded to include the 2017 schedule for developing the long-term strategy, ERO Enterprise Operational Plan, and metrics. The schedule includes touchpoints for the ERO Enterprise throughout the year, such as public postings, policy input requests, and MRC, NERC Board, Regional Entity, and stakeholder-related meetings.

MRC policy input was requested on the schedule for 2017 (specifically related to the strategic planning activities highlighted in yellow) and overall improvements to the strategic planning process and its supporting activities as described above.
Next Steps for Distributed Energy Resources Task Force Final Report

Action
Discussion

Background
The Distributed Energy Resources Task Force (DERTF) was established in response to recommendations from the Essential Reliability Services Task Force (ERSTF) Measures Framework Report. The DERTF has developed a report which is being distributed to the Member Representatives Committee (MRC). The report is focused on operational and planning impacts of Distributed Energy Resources (DER) and examining the potential implications to bulk power system (BPS) reliability. This report explores existing policies and requirements oriented to support the reliable integration of DER with respect to BPS reliability. In developing this report, the task force reviewed the NERC Functional Model, existing NERC Reliability Standards, and coordinated with, Institute of Electrical and Electronics Engineers (IEEE)-1547-related efforts. Additionally, the task force reviewed definitions for Behind-the-Meter Generation (BTMG), Distributed Generation (DG), and other related terms to provide clear distinctions between each category.

Next Steps and Actions
The final report recommends action in several areas, including:

- Reliability Guidelines
- Data Sharing
- System Modeling
- DER Models
- Definitions
- Industry Collaboration

NERC has identified several actions that should be prioritized including enhancements to NERC Reliability Standards, guideline development by the technical committees, model improvements, and increased attention in assessments, monitoring, and reliability studies.

The NERC Board of Trustees (Board) requested policy input regarding how and at what pace NERC should respond to the recommendations in the report. The DERTF final report will be presented to the Board for approval at its February meeting.
Additional Policy Discussion of Key Items from Board Committee Meetings

**Action**
Discussion of specific items presented at the Board of Trustees (Board) Committee meetings. Staff presentations made at the Board Committee meetings will not be duplicated at the Member Representatives Committee (MRC) meeting.

**Summary**
On February 8, 2017, the MRC can expect to continue its increased participation and dialogue during the Board Committee meetings in San Diego. The MRC will have additional time for policy discussion, as part of its own agenda, to respond to the information that is presented during the Committee meetings.

The Finance and Audit Committee will hold its open meeting via conference call on February 2, instead of meeting in-person in San Diego. The agendas and associated background materials are posted approximately one week in advance of the meeting on the following webpage:

[Finance and Audit Committee]

The February 8, 2017, Board committee agendas and associated background materials are posted on the following webpages:

[Corporate Governance and Human Resources Committee]

[Compliance Committee]

[Standards Oversight and Technology Committee]
Update and Schedule of Near-Term Reliability Assessments

**Action**
Information

**Background**
NERC’s Rules of Procedure stipulate that NERC will (1) conduct, and report the results of, an independent assessment of the overall reliability and adequacy of the interconnected North American bulk power system (BPS), both as existing and as planned; (2) analyze off-normal events on the BPS; (3) identify root causes of events that may be precursors of potentially more serious events; (4) assess past reliability performance for lessons learned; (5) disseminate findings and lessons learned to the electric industry to improve reliability performance; and (6) develop reliability performance benchmarks.

NERC’s strategic plan and the Reliability Issues Steering Committee (RISC) recommendations identify the strategic direction and priority risks that should be assessed by NERC. At a high-level, RISC identified the following high and medium risks that the ERO should continue to assess:

- Changing Resource Mix
- BPS Planning
- Resource Adequacy and Performance
- Extreme Natural Events

The recommendations specifically identify assessment topics that should be considered by the ERO to pursue, including:

- Assess and conduct interconnection-wide technical studies, such as frequency and inertia response, voltage support, system strength, and inter-area oscillation assessments.
- Assess the risks associated with single points of disruption of natural gas as well as the uncertainty of supply.
- Assess Distributed Energy Resources in an effort to improve visibility, predictability, and the dispatchability needed to support BPS reliability.
- Assess proposed regulatory rules or statutes as well as any significant tariff rules related to the changing resource mix.
- Assess resource adequacy using probabilistic-based approaches.

The recommendations highlight the importance of conducting independent assessments through a stakeholder input and outreach process, informing and educating policy makers and industry leaders of reliability consequences, and pursuing recommendations that help assure a reliable BPS as the resource and load mix changes.
Summary of Plan

Based on NERC’s Rules of Procedure, along with NERC’s strategic plan and RISC priorities, NERC will conduct the following assessments in 2017 and 2018:

<table>
<thead>
<tr>
<th>Table 1: Scheduled Reliability Assessments</th>
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<tbody>
<tr>
<td>Assessment</td>
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<tr>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Long-Term Reliability Assessment</td>
</tr>
<tr>
<td>Winter Assessment</td>
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<tr>
<td>Summer Assessment</td>
</tr>
<tr>
<td>Single Point of Disruption</td>
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<tr>
<td>Distributed Energy Resources: Connection, Modeling, and Reliability Considerations</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Table 2: 2018 Scheduled Reliability Assessments</th>
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<tbody>
<tr>
<td>Assessment</td>
</tr>
<tr>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>Long-Term Reliability Assessment</td>
</tr>
<tr>
<td>Winter Assessment</td>
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<tr>
<td>Summer Assessment</td>
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</table>

The ERO maintains a list of special assessment topics being considered to pursue. Input to this list comes from various sources, including but not limited to, technical committees, the Member Representatives Committee, the Long-Term Reliability Assessment, State of Reliability Report, various Regional assessments and studies, and the RISC’s prioritized risks and recommendations. NERC and the Regional Entities develop a scope for each potential assessment. Additionally, NERC and the Regional Entities will determine data collection needs, schedule requirements, and technical groups and stakeholders that will ultimately support the assessment. As the RISC report was published since the list was last reviewed, a supplemental review of topics will need to be completed. NERC staff has supplemented the existing list with high-priority and near-term potential assessment topics that align with the RISC recommendations. As shown below, these have not been entirely scoped.
<table>
<thead>
<tr>
<th>Assessment Topic</th>
<th>Scope/Description</th>
</tr>
</thead>
</table>
| Increasing Variable Resource Curtailments           | **Risk Profile #1: Changing Resource Mix, Near-Term Recommendations**  
Increasing in zero-dollar and negative pricing on the grid and a parallel increase in curtailments can potentially pose reliability risks, especially as more variable resources are added to the system (ERCOT, MISO, and SPP as examples). These areas are already experiencing a greater number of curtailments with a greater amounts of curtailments. |
| Off-Peak/Shoulder Load Reliability Assessment       | **Risk Profile #2: BPS Planning**  
NERC’s LTRA and past seasonal assessments have mainly focused planning for the peak periods. Examination of off-peak load seasons warrants both planning and operational analysis. Typically, transmission and generation outages take place during the off-peak/shoulder months of the year when load is light and system is able to handle maintenance outages. However, with recent episodes of unexpected extreme weather (late winter/warm fall, early spring, etc.) has exerted some unforeseen operational challenges on system reliability. |
| Accelerated Nuclear Plan Retirements                | **Risk Profile #3: Resource Adequacy and Performance**  
Nuclear power plays an important role in reducing industry CO₂ emissions. Having no carbon emissions and very low variable costs, the nuclear fleet runs at very high capacity factors and displaces fossil fuel generation. While only a few new nuclear units are in the development pipeline, no additional units are planned to be built during the analysis period because of their very high capital cost. As the nuclear units age, industry, and state regulators have begun studying how long the existing nuclear units can be kept online. |
| 2017/2024 Solar Eclipse                             | **Risk Profile #7: Extreme Natural Events**  
Examine and explain potential operational and planning challenges throughout the U.S. ahead of the August 2017/2024 solar eclipse. This could include frequency and ramping analysis for high load areas across the trajectory of the eclipse. Higher loads combined with reduced output from solar (rooftop PV) resources could cause localized voltage and/or ramping issues. |
| Distributed Energy Resources*                        | **Risk Profile #1: Changing Resource Mix, Near-Term Recommendations**                                                                                                                                                                      |
| Demand and Variable Resource Forecasting Performance* | **Risk Profile #1: Changing Resource Mix, Near-Term Recommendations**  
**Risk Profile #2: BPS Planning, Mid-Term Recommendations**                                                                                                                                                                             |
<p>| Modeling Performance*                               | <strong>Risk Profile #2: BPS Planning, Near-Term Recommendations</strong>                                                                                                                                                                                |
| Evaluation of Resource Adequacy Approaches*         | <strong>Risk Profile #3: Resource Adequacy and Performance, Near-Term Recommendations</strong>                                                                                                                                                          |</p>
<table>
<thead>
<tr>
<th>Capacity Value for Generation with non-firm Fuel*</th>
<th>Risk Profile #1: Changing Resource Mix, Near-Term Recommendations</th>
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<tr>
<td></td>
<td>Risk Profile #3: Resource Adequacy and Performance, Near-Term Recommendations</td>
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<tr>
<td></td>
<td>Risk Profile #7: Extreme Natural Events, Near-Term Recommendations</td>
</tr>
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*Suggested topics for consideration based on 2016 RISC Recommendations*
Geomagnetic Disturbance Events Research Work Plan Update

**Action**
Information

**Background**
On September 22, 2016, FERC issued Order No. 830 approving Reliability Standard TPL-007-1 – Transmission System Planned Performance for Geomagnetic Disturbance (GMD) Events. In the order, FERC directed NERC to develop certain modifications to the Standard, including the following:

- Modify the benchmark GMD event definition used for GMD Vulnerability Assessments;
- Make related modifications to requirements pertaining to transformer thermal impact assessments;
- Require collection of GMD-related data, and for NERC to make it publicly available; and
- Require deadlines for Corrective Action Plans (CAPs) and GMD mitigating actions.

FERC established a deadline of 18 months from the effective date of Order No. 830 for completing the revisions, which is **May 29, 2018**.

FERC also directed NERC to: (i) file a work plan for GMD research by **May 29, 2017**; and (ii) collect GMD data (geomagnetically-induced currents and magnetometer) pursuant to Section 1600 of the Rules of Procedure and make the data publicly available. FERC noted that any entity wanting confidential treatment of their GMD data will bear the burden of justifying such treatment.

**Status**
Actions are underway to address all directives:

- NERC's research plan has been drafted with inputs from the Geomagnetic Disturbance Task Force (GMDTF) leaders and the Electric Power Research Institute (EPRI). NERC staff is currently considering resources and completion targets. The work plan includes tasking EPRI to:
  - Conduct additional studies to review Spatial Averaging;
  - Analyze 1-D earth conductivity models using new (3-D) measurement data; and
  - Develop additional transformer thermal models and analyze the thermal screening criterion (75 A/phase) used in TPL-007.
- NERC staff has engaged the Planning Committee (PC) on continuing to use the GMDTF to provide stakeholder input and review of research deliverables.
- A Rules of Procedure Section 1600 data request will be developed with input from the GMDTF and PC.
The Standards Committee initiated the standards project to address the TPL-007 directives in December by appointing the Standards Drafting Team (SDT) and authorizing the Standards Authorization Request (SAR). The SDT met in January and anticipates development of revisions to TPL-007 to address the standards directives by June 2017.
Inverter Disconnects During Transmission Disturbances

Action
Information

Background
On August 16, 2016, smoke from the Blue Cut wildfire in San Luis Obispo County, California resulted in the tripping of two 500 kV lines in the active fire area. After this tripping, there was a noticeable frequency excursion, with Peak Reliability Coordinator (RC) reporting the loss of over 1,000 MW across multiple renewable resources in the California Independent System Operator (CAISO) Balancing Authority. CAISO, Southern California Edison (SCE) and Peak RC confirmed that no conventional generators tripped, and all the resources that were lost practically instantaneously were utility scale renewables, primarily solar. While not a qualifying event in the ERO Events Analysis process, the occurrence was significant and unusual enough that the ERO requested an event report and is working with the engineers and planners at CAISO and SCE to better understand this first known major loss of renewable resources due to a transmission system disturbance.

The tripping of the first 500 kV line was due to smoke from the fire creating a fault. The line clearing performed as designed. The second 500 kV line tripped as a result of a smoke induced fault, again by design, and cleared within three cycles. Before that fault cleared, the transient caused by the fault was experienced at 26 nearby solar plants (thus the aggregate over 1,000 MW of generation). Solar plants produce direct current (DC) power, using an inverter to synchronize alternating current (AC) power delivery to the grid. During this event, within two cycles, the inverters stopped delivering AC power to the grid. Initial analysis showed:

- Many of the inverters stopped delivering AC power before the fault cleared, indicating that the faulted condition on the 500 kV lines alone created the condition that caused the response, as opposed to post-fault system response (transient stability).
- Many inverters calculated frequencies at the inverter terminals which are well outside of the values expected for a normally cleared fault. In this case, for example, many inverters calculated a system frequency in the range of 57 Hz during the fault, and therefore, shutdown.
- A thorough analysis of the event and the operating characteristics of the related equipment is underway.

Many of the newer resources have different operating characteristics, and to be reliably integrated these operating characteristics will require proper planning, design, and coordination. Maintaining reliability is embodied in the predictability, controllability and responsiveness of these operating characteristics. Analyses of these emerging characteristics and events must be completed to provide system planners and operators the flexibility to modify real-time operations to preserve the reliability of the grid.
This event provides important insights to challenges discussed in the Essential Reliability Services Task Force Measures Framework Report. The ERO will produce lessons learned and technical references from information gathered from this and like events.
**Cyber Automated Information Sharing System (CAISS) Overview**

**Action**
Information

**Summary**
In response to recommendations from the Electricity Subsector Coordinating Council (ESCC), the E-ISAC recently launched a technology proof-of-concept pilot for machine-speed automatic technical information sharing. The system is based on two industry standards:

1. Structured Threat Information eXpression (STIX)
2. Trusted Automated Exchange of Indicator Information (TAXII)

Previously called the “STIX/TAXII pilot,” it is now formally known as the Cyber Automated Information Sharing System (CAISS) and allows the E-ISAC to rapidly disseminate technical information about cyber and physical attacks using a computer-based sharing and analysis system.

CAISS has 10 initial participants and welcomes other utilities to join. It is based on technology provided by ThreatConnect, which provides the user front-end communications between participants, and Soltra Edge provides the user back-end communications between participants. NERC is paying for the back-end services, and any cost of hardware, software, or analysts at user sites is paid for by the participants.

The system exchanges “indicators” or pieces of information that can be used to identify suspected malicious behavior. In the cyber community, these indicators include items like IP addresses, words, and phrases found in phishing emails, or portions of computer code found in malware. In the physical community, it might include descriptions of vehicles, weapons, suspects, or other characteristics of a physical threat.

Later in 2017, this capability will be integrated into the E-ISAC’s new portal platform system as a feature available to participating members.
Update on FERC Reliability Matters

Action
Information

Background
Provided below is a summary of recent activity of the Federal Energy Regulatory Commission ("FERC" or the "Commission") impacting NERC matters. A presentation of these items will be given by Michael Bardee, Director, Office of Electric Reliability, FERC, during the February 8, 2017, MRC meeting.

Summary

Essential Reliability Services and the Evolving Bulk-Power System – Primary Frequency Response
On February 18, 2016, the Commission issued a notice of inquiry (NOI) seeking comment on whether to reform FERC regulations for the provision and compensation of primary frequency response, as a vital tool in ensuring reliability of the North American bulk electric system (BES). The NOI sought to consider steps to ensure maintenance of resources capable of providing primary frequency response as the nation’s resource mix continues to evolve. As part of this inquiry, for example, the NOI sought input on whether to:

- Amend the pro forma Large Generator and Small Generator Interconnection Agreements (LGIA and SGIA) to require that all new generation resources have frequency response capabilities as a precondition of interconnection;
- Implement primary frequency response requirements for existing generation resources; and
- Establish procurement and compensation mechanisms for primary frequency response.

On November 17, 2016, FERC issued a Notice of Proposed Rulemaking (NOPR) proposing to amend the pro forma LGIA and SGIA to require that all new generating facilities install, maintain, and operate equipment capable of providing primary frequency response as a condition of interconnection. In addition, FERC proposed to establish certain operating requirements, including maximum droop and deadband parameters in the pro forma LGIA and pro forma SGIA. FERC also asked whether it should impose additional requirements on existing resources through Reliability Standards or tariffs. The NOPR did not propose to impose a headroom requirement for new generating facilities or mandate that new generating facilities receive any compensation for complying with the proposed requirements. Comments on the NOPR were filed on January 24, 2017.
Regulations Implementing FAST Act Section 61003 - Critical Electric Infrastructure Security and Amending Critical Energy Infrastructure Information; and Availability of Certain North American Electric Reliability Corporation Databases to the Commission (Order No. 833)
On June 16, 2016, FERC issued a NOPR proposing to amend FERC regulations related to the Freedom of Information Act (FOIA) and Critical Electric/Energy Infrastructure Information (CEII) in order to implement provisions of the Fixing America’s Surface Transportation Act (FAST Act) pertaining to the designation, protection and sharing of CEII. The FAST Act, signed into law by President Barack Obama in December 2015, adds section 215A to the Federal Power Act to improve security and resilience of energy infrastructure in the face of emergencies. The FAST Act required FERC to issue regulations aimed at securing and sharing CEII. On November 17, 2016, FERC issued a final rule adopting its FAST Act NOPR by amending its regulations to add processes for the designation, protection, and sharing of CEII. FERC also clarified non-public and CEII treatment for data downloaded from NERC databases. The final rule became effective on January 5, 2017, and is applicable beginning December 21, 2016.

Regulations Implementing the FOIA Improvement Act of 2016 and Clarifying the FOIA Regulations (Order No. 832)
On June 30, 2016, President Obama signed the FOIA Improvement Act of 2016 directing limited procedural revisions to FOIA regulations. On November 17, 2016, FERC issued a final rule to incorporate these revisions. The final rule became effective on January 3, 2017.

Disturbance Control Standard – Contingency Reserve for Recovery from a Balancing Contingency Event Reliability Standard (Order No. 835)
On January 29, 2016, NERC submitted a petition for approval of proposed Reliability Standard BAL-002-2 (Disturbance Control Standard – Contingency Reserve for Recovery from a Balancing Contingency Event), which requires responsible entities to balance resources and demand and to recover from a system contingency through restoration of frequency and deployment of reserves necessary to replace capacity and energy lost due to generation or transmission equipment outages. On May 19, 2016, FERC issued a NOPR proposing to approve Reliability Standard BAL-002-2. On January 19, 2017, FERC issued a final rule approving Reliability Standard BAL-002-2 and new definitions. In addition, the Commission directed NERC to develop modifications to Reliability Standard BAL-002-2 regarding extensions of the 15-minute period for Area Control Error recovery, and also directed NERC to: (i) collect and report on data regarding additional megawatt losses following Reportable Balancing Contingency Events during the Contingency Reserve Restoration Period; and (ii) study and report on the reliability risks associated with megawatt losses above the most severe single contingency that do not cause energy emergencies. The final rule will become effective sixty (60) days after publication in the Federal Register.

Remedial Action Schemes Reliability Standard
On August 5, 2016, NERC filed a petition for approval of Proposed Reliability Standard PRC-012-2 (Remedial Action Schemes). The purpose of Reliability Standard PRC-012-2 is to ensure that Remedial Action Schemes (RAS) do not introduce unintentional or unacceptable reliability risks to the BES. On January 19, 2017, FERC issued a NOPR proposing to approve: (i) Reliability Standard PRC-012-2; (ii) associated violation risk factors and violation severity levels; (iii) implementation plan; (iv) the withdrawal of “pending” Reliability Standards PRC-012-1, PRC-013-1; and (v) PRC-014-1 and retirement of currently-effective Reliability Standards PRC-015-1 and PRC-016-1. The Commission is seeking clarifying comments addressing the category of “limited impact” RAS included in the proposed Reliability Standard. Based on comments and
information received, the Commission may issue directives. Comments are due sixty (60) days after publication in the *Federal Register*. 
## Accountability Matrix

**Action**
Information

**Background**
The Accountability Matrix tracks key action items resulting from the quarterly MRC and Board of Trustee meetings and the policy input letter responses. The Accountability Matrix is updated quarterly and posted on the [NERC website](http://nercwebsite).

**Attachment**

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Topic</th>
<th>Summary of Commitment</th>
<th>Comments/Status</th>
<th>Open/Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016-01</td>
<td>ERO Enterprise Strategic Planning Redesign and Metrics</td>
<td>(1) Consolidate strategic planning documents to ensure clearer linkages to the various inputs. (2) There should be a reduced set of metrics that are outcome and results-based.</td>
<td>In May 2016, NERC presented a consolidated ERO Enterprise Strategic Plan document that integrates the ERO Enterprise’s goals, metrics, longer-term strategic planning considerations, and the risk priorities from the RISC. In July 2016, policy input on the content for the strategic plan, including draft outcome and results-based metrics for 2017 was requested. Input will then be requested on the proposed strategic plan and metrics in October before submitting to the Board for approval in November. The Board approved the strategic plan and reliability metrics at its November meeting. Additionally, an efficiency and effectiveness metric is being presented to the Board for approval at its February meeting (see Item 2016-09)</td>
<td>Closed</td>
</tr>
<tr>
<td>2016-04</td>
<td>Communication of Action Plans in Response to Survey Results</td>
<td>Provide more clarity around action items from survey results.</td>
<td>NERC revisited the 2015 survey results and developed action plans to address concerns regarding regional consistency in registration and in compliance monitoring and enforcement. NERC is also analyzing the 2016 survey results to identify any additional themes and develop action plans to address these. The 2015 and 2016 action plans, as well as a final report of the survey results, was presented at the August 10 CGRHC meeting as draft and a final will be presented for Board acceptance in November. The Board accepted the report and action plans at its November meeting.</td>
<td>Closed</td>
</tr>
<tr>
<td>2016-05</td>
<td>Internal Controls Evaluations (ICE)</td>
<td>Increase registered entity engagement with internal controls evaluations.</td>
<td>The ERO Enterprise is working to enhance registered entity understanding of the benefits of internal controls and how the use of internal controls supports compliance with the NERC Reliability Standards and overall reliability of the BPS. The ERO Enterprise is revising the Internal Controls Evaluation Guide in an effort to streamline the process and ensure the Guide is effective and efficient process for input into compliance oversight planning.</td>
<td>Open</td>
</tr>
<tr>
<td>2016-07</td>
<td>MRRE Program Consistency</td>
<td>Develop follow-up actions to ensure consistency and address lessons learned from the MRRE program.</td>
<td>In the first quarter of 2016, NERC and Regional Entity executives approved a task force, made up of representatives from NERC and each of the Regional Entities, focused on coordinated oversight to enhance the Multi-Region Registered Entity (MRRE) process. The task force, in conjunction with ERO Enterprise compliance leadership, provides outreach to MRREs participating in the Coordinated Oversight Program and develops procedures for use throughout the ERO Enterprise. The task force issued a survey in June 2016 to seek MRRE feedback on the program. Survey results will be presented to ERO Enterprise compliance leadership in the third quarter of 2016. The task force will use the survey results and other inputs to inform process improvements that optimize efficiency of, and consistency in, coordinated oversight activities. Implementation of communication and training for new coordinated oversight of MRRE ERO Enterprise Procedure will occur in the first quarter of 2017.</td>
<td>Open</td>
</tr>
<tr>
<td>2016-08</td>
<td>Confidentiality of Information</td>
<td>Ensure that controls are in place within the ERO Enterprise on handling sensitive information.</td>
<td>NERC has developed detailed policies regarding the handling of confidential information. The company also conducts regular employee training regarding these policies and overall expectations regarding the handling of confidential information. Each department also has procedures on the handling of any specialized types of confidential information which that department receives, develops and utilizes in its operations. The company is also implementing a document management program and supporting systems that will further enhance the procedures and controls on the handling of confidential information. In addition, the company has an information security program that contains robust controls over access to NERC’s IT systems, and maintains physical security procedures that addresses access to areas within NERC’s offices where confidential information is stored. Additionally, NERC’s internal audit department is conducting audits of the ERO Enterprise in 2016 that focus on how confidential information is handled.</td>
<td>Open</td>
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<tr>
<td>2016-09</td>
<td>Metrics</td>
<td>Develop supplemental metrics that measure operational effectiveness.</td>
<td>A strawman of performance metrics for NERC will be included in the October policy input letter and presented at the MRC meeting in November. The performance metrics have evolved into a single metric on efficiency and effectiveness, with four measures. The efficiency and effectiveness metric will be presented to the Board for approval at its February 2017 meeting.</td>
<td>Open</td>
</tr>
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<td>2016-10</td>
<td>Feedback Loops</td>
<td>Clarify what the feedback loops are, including how and when they are being used.</td>
<td>In addition to industry feedback (RISC and Stakeholder Surveys) and NERC’s assessment of all Category 3 and above events to identify gaps in Reliability Standards, Compliance and enforcement input during Reliability Standards development, and identification of reliability and compliance trends, the ERO Enterprise is documenting additional feedback loops to address identified reliability and security risks.</td>
<td>Closed</td>
</tr>
<tr>
<td>2016-11</td>
<td>Historical Data for Corporate Metrics</td>
<td>Provide historical data for corporate metrics to stakeholders.</td>
<td>Historical data is posted on the NERC website (<a href="http://www.nerc.com/AboutNERC/Pages/Strategic-Documents.aspx">http://www.nerc.com/AboutNERC/Pages/Strategic-Documents.aspx</a>) and is referenced in the strategic planning presentation for the February MRC meeting.</td>
<td>Closed</td>
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<tr>
<td>2016-12</td>
<td>Guidelines and Technical Basis for Standards</td>
<td>Clarify the intent of the ‘Guidelines and Technical Basis’ section of Reliability Standards.</td>
<td>An update will be provided at the February SOTC meeting.</td>
<td>Open</td>
</tr>
</tbody>
</table>
Update on Regulatory Matters
(As of January 25, 2017)

Action
Information

FERC Orders Issued Since the Last Update
FERC orders are available on the NERC website [FERC Orders][1] page.

NERC Filings to FERC Since the Last Update
NERC filings to FERC are available on the NERC website [FERC Filings][2] page.

NERC Filings in Canadian Jurisdictions Since the Last Update
NERC filings to Canadian applicable governmental authorities are available on the NERC website [Canadian Filings and Orders][3] page. This page also contains links to the websites of each of the Canadian applicable governmental authorities, where orders, consultation records, and other records related to NERC matters may be found.

Processes for making standards enforceable and monitoring and enforcing compliance are specific to each jurisdiction in Canada. The Federal, Provincial, and Territorial Monitoring and Enforcement Sub-group (MESG) has developed provincial summaries of each province’s electric reliability standard-making and enforcement functions, with U.S. comparators. The [Canada][4] page of the NERC website contains these summaries, as well as a link to the [Canadian MOU][5] page.

Anticipated NERC Filings
Highlights of NERC filings that will be submitted to applicable governmental authorities in the U.S. and Canada appear below:

1. January 30, 2017 – NERC will submit comments in response to FERC’s NOPR proposing to amend its regulations under the Federal Power Act to remove barriers to the participation of electric storage resources and distributed energy resource aggregators in the organized wholesale electric markets. FERC seeks comment on whether the Reliability Standards may create barriers to the participation of these resources in the markets. [Docket Nos. RM16-23-000, AD16-20-000][6]

2. February 14, 2017 – Within 45 days of the end of each quarter, NERC must submit the unaudited report of the NERC budget-to-actual spending variances during the preceding quarter. [Docket No. FA11-21-000][7]

   Pending Board approval


4. March 7, 2017 – NERC will submit proposed Texas RE revisions to its Bylaws and Standards Development Procedure.

   Pending Board approval
5. March 7, 2017 – NERC will submit, for informational purposes, proposed revisions to Regional Reliability Standard BAL-001-TRE-1 Attachment 2.

   *Pending Board approval*

7. March 9, 2017– NERC will submit proposed Reliability Standards IRO-002-5 (Reliability Coordination - Monitoring and Analysis) and TOP-001-4 (Transmission Operations).
   *Pending Board approval*

8. March 9, 2017 – NERC will submit proposed Reliability Standards EOP-004-4 (Event Reporting), EOP-005-3 (System Restoration from Blackstart Resources), EOP-006-3 (System Restoration Coordination), and EOP-008-2 (Loss of Control Center Functionality).
   *Pending Ballot Body for EOP-004-4 and Board approval*

   *Pending Board approval*

10. March 31, 2017 – NERC must submit the annual Standards Report, Status and Timetable for Addressing Regulatory Directives report informational filing. *Docket No. RR09-6-003*


**Mexican Energy Reforms**

In 2013 and 2014 Mexico’s legislature enacted comprehensive energy reforms, including functional unbundling of the previously vertically integrated state-owned utility; establishing a competitive electricity market; and establishing Mexico’s first mandatory reliability framework. Mexico has made steady progress in implementing these reforms, and work is ongoing.

Over the past year, NERC and WECC have served as resources to the Mexican energy regulatory commission, Comisión Reguladora del Energía (CRE); the Mexican market and system operator, Centro Nacional de Control de Energía (CENACE); and the Mexican energy ministry, Secretaría de Energía (SENER). Several important reliability-related milestones have been achieved in 2016:


2. On October 17, 2016, CRE hosted a meeting of Mexican, Canadian, and U.S. officials, along with NERC and WECC senior leaders, to discuss next steps for formalizing Mexico’s participation in the international ERO. Three agreements are being developed as a result of this meeting: 1) Bilateral reliability principles between the U.S. and Mexican governments; 2) a memorandum of understanding (MOU) between NERC, CRE, and CENACE; and an updated membership and operating agreement between WECC and CRE.

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1 Commissioner Marcelino Madrigal Martínez provided an update on the implementation of Mexico’s energy reforms during the February 11, 2016 NERC Board of Trustees meeting.
3. On January 7, 2017, bilateral reliability principles were signed by Mexican and US officials. These principles recognize the role of NERC as the international ERO for North America and are a positive step toward increased participation of Mexican stakeholders in the ERO.

Additional details related to Mexico are provided under agenda item 4.