

Agenda

Technology and Security Committee

August 9, 2018 | 2:00-3:00 p.m. Eastern
Conference Call

Dial-in: 1-800-458-4121 | Conference Code: 3335679

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Call to Order

Introductions and Chair's Remarks

NERC Antitrust Compliance Guidelines

Agenda Items

1. **Minutes* — Approve**
 - a. May 9, 2018 Meeting
2. **ERO Enterprise Information Technology Strategy and IT Projects Update* — Review**
3. **E-ISAC Update* — Review**
4. **2019 Business Plan and Budget Update: E-ISAC and Information Technology* — Review**
5. **Adjournment**

*Background materials included.

Antitrust Compliance Guidelines

I. General

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

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

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

II. Prohibited Activities

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

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

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

III. Activities That Are Permitted

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

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

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

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

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

- Reliability matters relating to the bulk power system, including operation and planning matters such as establishing or revising reliability standards, special operating procedures, operating transfer capabilities, and plans for new facilities.
- Matters relating to the impact of reliability standards for the bulk power system on electricity markets, and the impact of electricity market operations on the reliability of the bulk power system.
- Proposed filings or other communications with state or federal regulatory authorities or other governmental entities.
- Matters relating to the internal governance, management and operation of NERC, such as nominations for vacant committee positions, budgeting and assessments, and employment matters; and procedural matters such as planning and scheduling meetings.

DRAFT Minutes Technology and Security Committee Meeting

May 9, 2018 | 11:00 a.m. – 12:00 p.m. Eastern

The Ritz-Carlton, Pentagon City
1250 S. Hayes Street
Arlington, VA 22202

Chair George S. Hawkins called to order a duly noticed open meeting of the Technology and Security Committee (the “Committee”) of the Board of Trustees (“Board”) of the North American Electric Reliability Corporation (“NERC” or the “Company”) on May 9, 2018, at 11:00 a.m. Eastern, and a quorum was declared present. The agenda is attached as **Exhibit A**.

Present at the meeting were:

Committee Members

George S. Hawkins, Chair
Janice B. Case
Kenneth W. DeFontes, Jr.
Suzanne Keenan
Roy Thilly

Board Members

Robert G. Clarke
Frederick W. Gorbet
David Goulding
Robin Manning
Jan Schori
Jim Robb, President and Chief Executive Officer

NERC Staff

Charles A. Berardesco, Senior Vice President, General Counsel, and Corporate Secretary
Tina Buzzard, Associate Director
Robert Goldfin, Associate Counsel
Howard Gugel, Senior Director of Standards and Education
Stan Hoptroff, Vice President, Chief Technology Officer, and Director of Information Technology
Scott Jones, Senior Vice President, Chief Financial and Administrative Officer, and Corporate Treasurer
Bill Lawrence, Senior Director of E-ISAC
Mark G. Lauby, Senior Vice President and Chief Reliability Officer
Ken McIntyre, Vice President and Director of Standards and Compliance
Sonia C. Mendonça, Vice President, Deputy General Counsel, and Director of Enforcement
Jack Norris, Performance Analysis Engineer
Janet Sena, Senior Vice President and Director of Policy and External Affairs
Michael Walker, Senior Vice President and Chief Enterprise Risk and Strategic Development Officer

NERC Antitrust Compliance Guidelines

Mr. Hawkins directed the participants’ attention to the NERC Antitrust Compliance Guidelines included in the agenda, and indicated that all questions regarding antitrust compliance or related matters should be directed to Mr. Berardesco.

Chair's Remarks

Mr. Hawkins welcomed the Committee members, and noted that, among other things, the Committee will help enhance ongoing efficiency and effectiveness measures by understanding the benefits of all ERO Enterprise projects.

Minutes

Upon motion duly made and seconded, the Committee approved the minutes of the February 7, 2018 meeting as presented at the meeting.

ERO Enterprise Information Technology Projects Update

Mr. Hoptroff provided an overview of the ERO Enterprise projects, referencing the materials that had been included in the advance agenda package. He provided an update on the Compliance Monitoring and Enforcement Program ("CMEP") Technology Project, noting the primary value and benefit of the investment is creating a single, common portal for all entities, with consistent interface and support for all users. Mr. Hoptroff explained that the CMEP Technology Project will provide advance analytics, the ability to implement audit best practices, and enhanced security of data. He reviewed the project timeline and schedule, noting that a vendor was selected and negotiations are underway.

Mr. Hoptroff highlighted ongoing improvements to the NERC public-facing website, including a new search feature enabled in March 2018. He discussed work already underway regarding the dissolution of SPP RE, including the transfer of data from SPP RE to MRO and SERC. Mr. Hoptroff provided an overview of E-ISAC technology updates, noting that investments will enhance staff's ability to analyze data. He summarized upcoming priorities including CMEP harmonization and investments for the E-ISAC portal. Mr. Hoptroff discussed tracking efficiency gains from the technology projects.

E-ISAC Update

Mr. Lawrence provided an update on recent E-ISAC activities, and focused on information sharing, analysis, and engagement. He highlighted the E-ISAC's rapid response to a recent issue involving crypto-mining malware. Mr. Lawrence highlighted the successes of the CRISP program. He noted that the average cost per user for CRISP has decreased as a result of increases in membership and cost sharing. Mr. Lawrence noted upgrades to the E-ISAC portal including improved email communications.

Misoperations Application Demo

Mr. Norris presented features of the Misoperations Information Data Analysis System ("MIDAS") including: real-time feedback on submissions; live access to data after submission; the ability to edit records; use of a single portal to make submissions for multiple entities; the ability for E-ISAC to make submission status reports; and the ability for entities to view misoperations rate reports. He noted that entities feedback regarding MIDAS is almost entirely positive, and feedback by the Regional Entities is also positive. Mr. Norris discussed the benefits of MIDAS, including an improved experience for users, an increase of on-time submissions, and enhanced capabilities for current and future data collection processes.

Adjournment

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

Submitted by,

A handwritten signature in black ink, appearing to read 'Charles A. Berardesco', written in a cursive style.

Charles A. Berardesco
Corporate Secretary

ERO Enterprise Information Technology Strategy and Projects Update

Action

Information

Background

At the May 9, 2018 open meeting of the Technology and Security Committee, an update was provided on the Compliance Monitoring and Enforcement Program (CMEP) Technology Project.¹ Key points made during the update included the selection of a software vendor, status of the process harmonization workshops, stakeholder engagement (including the relationship with the Certification and Compliance Committee and the Alignment Working Group), and vendor software contracting. Several additional issues were discussed, including configuration for international entities, management of historical data, and interacting with the Federal Energy Regulatory Commission.

Other updates included the demonstration of the new portal for misoperations data management, plans for the new registration system, and new technology solutions for the Electricity Information Sharing and Analysis Center (E-ISAC). Benefits for the new misoperations data management portal include an improved user experience, the ability to update and edit submissions, and easy access to various reports. The Entity Registration solution will provide several benefits, including the elimination of manual email submissions, improved access to data, and consolidation of existing systems and practices into a single point for the management of all registration requests and information. Regarding the E-ISAC, a new feature—email notifications—was added to the portal in late March 2018.

Further, NERC leadership reported that the search capability for NERC's public-facing website had been improved, as well as, provided information on Information Technology (IT) activities related to the dissolution of the Southwest Power Pool RE (SPP RE), and discussed the 2019–2021 IT budget forecast.

Summary

Since the May meeting, a contract has been finalized with a software vendor selected for the CMEP Technology Project. Current projections, based on the executed contract, indicates there will be additional financial savings beyond those estimated in the business case. Harmonization of the core CMEP business processes is well underway. This includes self-reporting, enforcement processing, mitigation plans and tracking, self-certifications, compliance planning, compliance audits, and spot checks. A high-level training, testing, and deployment plan for the CMEP Technology Project has also been built and a detailed work-based schedule is in development.

¹The CMEP Technology Project is a strategic initiative designed to support the ERO Enterprise as it continues to evolve as a risk-informed regulator. It supports three ERO Enterprise goals: implementation of a risk-informed CMEP (Goal 2), reduction of known risks to reliability (Goal 3), and improving the efficiency and effectiveness of the ERO (Goal 6).

Additionally, work supporting the scheduled investments in Entity Registration continues, along with the planning for integrations necessary to provide the new CMEP Technology solution with both Entity Registration and Reliability Standards data.

For the E-ISAC Portal, the ability to create, configure, and manage User Communities and associated discussion forums was deployed at the end of June 2018. The goal of this effort is to provide a more interactive and collaborative experience for portal users, within which they can both formally and informally exchange information related to security and threats. Future work to support more user access to robust analytics through the portal is ongoing.

The technology transition associated with the dissolution of SPP RE was completed at the end of June. NERC IT continues to work closely with our internal customers as well as the staff at SPP RE, Midwest Reliability Organization, and SERC Reliability Corporation to support the operational transition of responsibilities and stands ready to assist, should any unanticipated needs arise.

In summary, NERC IT is progressing well in its mission to deliver technology solutions that support the effective and efficient use of resources for registered entities, the ERO Enterprise, and the E-ISAC.

E-ISAC Quarterly Update

Action

Information

Background

The E-ISAC is implementing the Long-Term Strategic Plan in 2018, following a strategic framework developed with the Member Executive Committee (MEC), with the focus areas of information sharing, analysis, and engagement.

Summary

In late 2017, the E-ISAC and the Electricity Subsector Coordinating Council's MEC developed a graphical strategic framework to execute the Long-Term Strategic Plan. In 2018, the MEC met in January, March, and June, and reviewed all of the ongoing projects and initiatives at the E-ISAC.

Key activities from those projects and initiatives include expansion of the Cybersecurity Risk Information Sharing Program (CRISP), E-ISAC Portal enhancements, and hiring additional security analysts and other staff. Additionally, the MEC submitted a resolution in support of the E-ISAC portion of the 2019 NERC Business Plan and Budget.

2019 Business Plan and Budget Update: E-ISAC and Information Technology

Action

Information

Summary

NERC management will briefly discuss the latest information on the 2019 Business Plan and Budget related to the E-ISAC and Information Technology (IT). A summary is included below.

The 2019 E-ISAC budget is increasing \$5.6M from 2018 due to aggressive implementation of the second year of the E-ISAC long-term strategy. This includes 11 new FTEs, primarily to support increased analytics, additional enhancements to the new user portal, and additional GridEx support.

The 2019 IT budget is increasing \$430k from 2018. The IT department continues to support new functionality and infrastructure for NERC and the ERO Enterprise. This includes project management for the development of critical ERO Enterprise technology solutions, including the CMEP Technology Project and complementary Entity Registration and Standards tools, as well as an upgrade to the situational awareness tool, SAFNR.