

Agenda Technology and Security Committee

November 1, 2019 | 2:00-3:00 p.m. Eastern Conference Call

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Introductions and Chair's Remarks

NERC Antitrust Compliance Guidelines and Public Announcement*

Agenda Items

- 1. Minutes* Approve
 - a. August 14, 2019 Meeting
- 2. ERO Enterprise IT Projects Update* Review
- 3. E-ISAC Update* Review
- 4. 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

August 14, 2019 | 10:15-11:00 a.m. Eastern

Hilton Québec 1100 Boulevard René-Lévesque E Québec, QC G1R 4P3, Canada

Chair Suzanne Keenan 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 August 14, 2019, at 10:15 a.m. Eastern, and a quorum was declared present. The agenda is attached as **Exhibit A.**

Present at the meeting were:

Committee Members	Board Members	
Suzanne Keenan, Chair	Robert G. Clarke	
Janice B. Case	Frederick W. Gorbet	
Kenneth W. DeFontes	David Goulding	
George S. Hawkins	Robin E. Manning	
Roy Thilly, ex officio	James B. Robb, President and Chief Executive Officer	
	Jan Schori	
	Colleen Sidford	

NERC Staff

Charles A. Berardesco, Senior Vice President, General Counsel, and Corporate Secretary Tina Buzzard, Associate Director

Stan Hoptroff, Vice President, Chief Technology Officer, and Director of Information Technology Bill Lawrence, Vice President, Chief Security Officer, and Director of the E-ISAC Mark G. Lauby, Senior Vice President and Chief Engineer
Sânia Mandanca, Vice President, Danuty General Counsel, and Director of Enforcement

Sônia Mendonça, Vice President, Deputy General Counsel, and Director of Enforcement Janet Sena, Senior Vice President and Director of Policy and External Affairs

NERC Antitrust Compliance Guidelines

Ms. Keenan 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

Ms. Keenan welcomed the participants to the meeting. She highlighted the upcoming Grid Security Conference in Atlanta and in particular mentioned a breakfast event focusing on diversity and inclusion



of women in the energy field. She also reported on the July 9, 2019 E-ISAC Member Executive Committee call.

Minutes

Upon motion duly made and seconded, the Committee approved the minutes of the May 8, 2019 meeting as presented at the meeting.

ERO Enterprise IT Projects Update

Mr. Hoptroff highlighted stakeholder engagement on data management within Align. Mr. Robb announced that the first release of Align will be delayed to focus on issues that were to be addressed in later releases. He clarified that the actual release date will be announced at a later date. Ms. Keenan stated that the Board supports the schedule adjustment. She noted that as a former chief information officer, she was impressed with the focus on security and stakeholder engagement.

Ryan Stewart discussed the Centralized Organization Registration ERO System ("CORES") registration tool. Mr. Robb emphasized the transformational nature of the project and its vast improvement in managing the registration database.

Mr. Hoptroff reviewed the status of the Situational Awareness for FERC, NERC, and the Regional Entities ("SAFNR") v3 project and key features, activities with the FRCC/SERC transition, E-ISAC customer relationship management, and E-ISAC Portal improvements.

E-ISAC Update

Mr. Lawrence noted the passing of Mike Assante. He recognized Bluma Sussman as a resource for E-ISAC member engagement. Mr. Lawrence reviewed the November 2019 Grid Security Exercise, GridEx V, and the key components of the exercise. He reviewed the draft 2020 performance metrics for the E-ISAC, which focus on E-ISAC strategic goals.

Mr. Robb expressed appreciation to the MEC, especially John McAvoy and Bill Fehrman as Chair and Vice Chair. He noted the success in hiring and the quality of new employees. Mr. Robb discussed the collaboration between the E-ISAC and Canadian stakeholders and his hope to increase voluntary information sharing. Mr. Clermont observed that there are differences in how the United States and Canadian government shares and handles information.

Adjournment

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

Submitted by,

Charles A. Berardesco Corporate Secretary

Agenda Item 2
Technology and Security
Committee Meeting
November 1, 2019

ERO Enterprise Information Technology Projects Update

Action

Update

Background

At the August 14, 2019 open meeting of the Technology and Security Committee, an update was provided on the ERO Information Technology (IT) Strategy. Additionally, updates were provided on the Align Project^[1] and a demo of the Centralized Organization Registration Entity System (CORES) project.

In addition, NERC's CEO, Jim Robb, recommended a delay in the first release of Align until such time when additional process improvement efforts can be completed and additional steps can be taken for data protection. The NERC Board of Trustees approved the recommended delay. Additionally, updates were given on IT solutions for the Electricity Information Sharing and Analysis Center (E-ISAC) and on the proposed 2020 IT budget as well as the budget forecast for 2021 and 2022.

Summary

Since the August meeting, additional configuration and testing work has been completed for the first release of Align. Based on user feedback, a number of refinements, clarifications, and enhancements have been identified and implemented to help ensure a successful launch of the system for self-reports, enforcement, and mitigation. The goal remains for the first release of Align to occur in 2020.

There continues to be a strong focus on ensuring the security and protection of the Align application and related data. In addition to the implementation of multi-factor authentication (MFA) for client access to the Align solution (as well as many other online ERO Enterprise resources), additional work continues with the business to enhance ERO Enterprise policies, procedures, and technology solutions to best manage these risks.

In addition, as previously reported, the new CORES system for entity registration was released on July 15. A small number of additional enhancements have been completed and will be placed in production as part of a 1.1 release no later than November 2019.

Development of version 3 of the system for Situation Awareness for FERC, NERC and Regions (SAFNR) by ResilientGrid is underway. This investment will enable NERC to continue to undertake situational awareness activities consistent with Section 1000 of the Rules of Procedure. The new SAFNR solution should be available by the end of 2019. Highlights of the new version include:

^[1] The Align Project (previously referred to as the 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).

- Greater levels of detail beyond the existing data set, as well as additional displays (such as hourly Balancing Authority (BA) actual load, BA forecasted load, BA net actual interchange, and Reliability Coordinator Status)
- Visualization of environmental conditions impacting reliability, such as weather and space weather
- Improved search capability to search for generators, substations, and transmission lines by name or location

E-ISAC Portal user communities and portal security on E-ISAC.com continues to be focus areas for enhancement and development. In addition, the implementation of a new member engagement solution for the E-ISAC, using Salesforce, occurred at the end of October 2019.

NERC IT continues in its mission to deliver technology solutions supporting the effective and efficient use of resources for registered entities, the ERO Enterprise, and the E-ISAC.

Agenda Item 3
Technology and Security
Committee Meeting
November 1, 2019

E-ISAC Update

Action

Review

Background

Management will provide the Technology and Security Committee (Committee) with an update regarding the planning of the E-ISAC's biennial security exercise, GridEx V, and the E-ISAC's annual industry security conference, GridSecCon 2019.

In addition, management will provide the Committee with an overview of the E-ISAC's recommended 2020 performance metrics which were recently reviewed with and endorsed by the Member Executive Committee of the Electricity Subsector Coordinating Council. These metrics are designed to align with the goals and the key supporting activities set forth in the E-ISAC's Long-Term Strategic Plan. These metrics are expected to evolve over time as the E-ISAC's processes and data sources mature. Metric results will also inform future updates to the key activities and goals in the Long-Term Strategic Plan, as well as detailed annual work plan priorities.

Subject to the Committee's review and endorsement, these metrics will be presented to the Board of Trustee's Corporate Governance and Human Resources Committee for final endorsement and inclusion into NERC's overall corporate performance metrics.

Management will close the presentation by briefly reviewing ongoing initiatives to improve information sharing between the E-ISAC and its members.