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	Board Members
George S. Hawkins, Chair	Robert G. Clarke
Janice B. Case	Frederick W. Gorbet
Kenneth W. DeFontes, Jr.	David Goulding
Suzanne Keenan	Robin Manning
Roy Thilly	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,

Charles A. Berardesco
Corporate Secretary

Agenda
Technology and Security Committee
May 9, 2018 | 11:00 a.m.-12:00 p.m. Eastern

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1250 S. Hayes Street
Arlington, VA 22202

Conference Room: Ritz-Carlton Grand Ballroom

Call to Order

Introductions and Chair's Remarks

NERC Antitrust Compliance Guidelines

Agenda Items

1. **Minutes* — Approve**

   a. February 7, 2018 Meeting

2. **ERO Enterprise Information Technology Projects Update* — Review**

3. **E-ISAC Update* — Review**

   a. **Preliminary 2019 E-ISAC Budget Forecast**

4. **Misoperations Application Demo* — Review**

5. **Adjournment**

*Background materials included.