

Minutes

Board of Trustees

February 6, 2020 | 8:30 a.m.-12:00 p.m. Pacific

westdrift Manhattan Beach, Autograph Collection 1400 Park View Avenue Manhattan Beach, California 90266

Call to Order

Mr. Roy Thilly, Chair, called to order the duly noticed open meeting of the Board of Trustees (the "Board") of the North American Electric Reliability Corporation ("NERC" or the "Corporation") in Manhattan Beach, California on February 6, 2020, at 8:30 a.m. Pacific, and a quorum was declared present. The agenda is attached as **Exhibit A**.

Present at the meeting were:

Board Members

Roy Thilly, Chair
Kenneth W. DeFontes, Chair-Elect and Vice Chair
Robert G. Clarke
George S. Hawkins
Suzanne Keenan
Robin E. Manning
Jim Piro
James B. Robb, President and Chief Executive Officer
Jan Schori
Colleen Sidford

NERC Staff

Tina Buzzard, Associate Director
Manny Cancel, Senior Vice President and Chief Executive Officer of the E-ISAC
Howard Gugel, Vice President, Engineering and Standards
Stan Hoptroff, Vice President, Business Technology
Ed Kichline, Senior Counsel and Director of Enforcement Oversight
Mark Lauby, Senior Vice President and Chief Engineer
Bill Lawrence, Vice President, ERO Enterprise Security Initiatives
Sônia Mendonça, Senior Vice President, General Counsel, and Corporate Secretary
Janet Sena, Senior Vice President, External Affairs
Andy Sharp, Vice President, and Interim Chief Financial Officer
Mechelle Thomas, Vice President, Compliance



NERC Antitrust Compliance Guidelines

Mr. Thilly noted the public nature of the meeting and directed the participants' attention to the NERC Antitrust Compliance Guidelines included with the advance meeting materials. He stated that any additional questions regarding these guidelines should be directed to Ms. Mendonça.

Welcoming Remarks

Mr. Thilly welcomed all of the attendees to the meeting, including new trustee, Jim Piro, and the guests in attendance, Mr. Pedro Pizzaro from Edison International, Chairman Neil Chatterjee from the Federal Energy Regulatory Commission ("FERC"), Mr. Chuck Kosak, from the Department of Energy, Mr. William Fehrman of the Member Executive Committee ("MEC"), and Mr. David Morton, Canada's Energy and Utility Regulators ("CAMPUT") Representative to NERC.

Consent Agenda

Upon motion duly made and seconded, the Board approved the consent agenda as follows:

Minutes

The draft minutes for the December 12, 2019 conference call and November 5, 2019 meeting were approved as presented to the Board at this meeting.

Committee Membership and Charter Amendments

Reliability Issues Steering Committee

RESOLVED, that the Board hereby appoints the following individuals to the Reliability Issues Steering Committee ("RISC") as follows:

Name	Company	Term Ending
Brian Slocum, Vice Chair	ITC Holdings	January 31, 2022
Joe Sowell, At-Large Member	Georgia Transmission Corporation	January 31, 2022
Charles King, At-Large Member	Kansas City Power & Light Co.	January 31, 2022
Priti Patel, At-Large Member	Great River Energy	January 31, 2021
Woody Rickerson, At-Large	ERCOT	January 31, 2022
Member		
Chris Janick, At-Large Member	Salt River Project	January 31, 2022
Charles Yeung, At-Large Member	Southwest Power Pool, Inc.	January 31, 2022
Mark Ahlstrom, At-Large	NextEra Energy Resources, LLC	January 31, 2022
Member		
Maury Galbraith, At-Large	WIRAB	January 31, 2022
Member		
Sylvain Clermont, MRC Member	Hydro-Quebec TransEnergie	January 31, 2022
Jennifer Sterling, MRC Member	Exelon	January 31, 2022
David Zwergel, Reliability and	Midcontinent ISO	January 31, 2021
Security Technical Committee		
Vice Chair		



Amy Casuscelli, Standards	Xcel Energy	January 31, 2021
Committee Chair		
Patti Metro, Compliance &	National Rural Electric Cooperative	January 31, 2021
Certification Committee Member	Association	

Critical Infrastructure Protection Committee

RESOLVED, that the Board hereby appoints the following individuals to the Critical Infrastructure Protection Committee ("CIPC"):

- Carter Manucy (Florida Municipal Power Agency), as the APPA at-large representative to CIPC, with Jack Cashin continuing as the APPA representative on the CIPC Executive Committee.
- John Breckenridge (Kansas City Power & Light Co.), as the MRO Physical Security representative.

Personnel Certification Governance Committee

RESOLVED, that the Board hereby appoints the following individuals to the Personnel Certification Governance Committee ("PCGC"), each for a two-year term ending December 31, 2021:

- Mark Ellis, American Electric Power
- Dave Carlson, Exelon Utilities
- Keith Carman, Tri-State G & T
- Brett Hallborg, BC Hydro
- Michael Hoke, PJM

Regular Agenda

Remarks by Pedro Pizarro, President and CEO, Edison International

Mr. Robb introduced Mr. Pizarro of Edison International. Mr. Pizarro remarked on collaboration with governmental agencies and NERC, emphasizing that partnerships among utilities and governmental entities are an important tool for success. He discussed the increased engagement between NERC and industry under Mr. Robb's leadership, highlighting industry's interest in cybersecurity matters.

Mr. Pizarro spoke on the importance of using a risk-based approach to compliance to focus on the greatest risks to reliability of the bulk power system. He discussed how to evaluate wildfire threats, and the evolution of wildfire mitigation plans.

Remarks by Neil Chatterjee, Chairman, FERC

Mr. Thilly introduced Chairman Chatterjee of FERC. Chairman Chatterjee remarked that reliability and security are top priorities for FERC, highlighting the importance of continued cooperation between FERC,



NERC, and the Regional Entities. He discussed assessing and mitigating risks associated with moving realtime operations to the cloud, and risks associated with supply chain management.

Remarks by Chuck Kosak, Duputy Assistant Secretary, U.S. Department of Energy ("DOE")

Mr. Thilly introduced Mr. Kosak of DOE, noting Mr. Kosak's experience at the Department of Defense, and as a planner and risk manager. Mr. Kosak remarked on the North American energy resiliency model of: 1) hiring expert scenario developers to evaluate naturally occurring and man-made threats; 2) officers' use of intelligence data to evaluate plans of adversaries; and 3) executing qualitative analysis to focus on probabilistic threats, allowing for realistic training and exercises.

NIAC Update and Recommendations to the President, William Fehrman, Vice Chair, MEC

Mr. Fehrman provided an update on the National Infrastructure Advisory Council (NIAC), detailing how best to approach responding to a cybersecurity event. He discussed three fundamental recommendations: 1) creating a location where industry and the intelligence agencies can quickly share information and allow for timely decision-making; 2) enabling operators to post issues with vendors, allowing vendors to respond to the issues; and 3) having a single point of entry into the government.

Remarks by David Morton, CAMPUT Representative to NERC

Mr. Thilly introduced Mr. Morton. Mr. Morton recognized retiring Board members Ms. Janice Case, Mr. David Goulding, and Mr. Fred Gorbet; and welcomed Mr. Jim Piro to the Board. Mr. Morton reported that CAMPUT's annual conference will take place in New Brunswick from May 3-5, 2020 and that Mr. Robb will attend and meet with CAMPUT leadership.

President's Report

Mr. Robb remarked that 2019 was a transformational year for NERC. He discussed NERC's Annual Report; security initiatives; and personnel updates, including the appointments of Ms. Mendonça as General Counsel; Mr. Lawrence as Vice President, ERO Enterprise Security Initiatives; and Mr. Cancel as Senior Vice President and Chief Executive Officer of the E-ISAC.

Mr. Robb provided an update on five areas of focus for 2020: 1) expanding risk-based focus in standards, compliance monitoring, and enforcement; 2) accessing and catalyze steps to mitigate known and emerging risks to reliability and security; 3) building a strong E-ISAC-based security capability; 4) strengthening engagement across the reliability and security ecosystem in North America; and 5) capturing effectiveness, efficiency, and continuous improvement opportunities.

Mr. Robb noted that Tim Gallagher stepped down as the ERO Executive Committee ("EC") co-chair, and that Ms. Sara Patrick is the current EC Co-Chair. Ms. Patrick addressed the increased collaboration among stakeholders and the ongoing transformation for the ERO Enterprise.

Mr. Robb described NERC's ongoing work with the North American Transmission Forum (NATF) regarding Facility Ratings issues and mitigating supply chain risks.

Report on January 13-14 and February 4, 2020 Closed Sessions and January 14-15 ISO New England Joint **Board Meeting**



Mr. Thilly reported that on January 13-14 and on February 4 2020, before the open meeting, as is its custom, the Board met in closed session with NERC management to review NERC management activities. In these sessions, the Board discussed confidential matters, including performance management, compensation, and successive planning. The Board also discussed legal issues.

Mr. Thilly reported that the NERC Board of Trustees met with ISO New England leadership on January 14-15, 2020.

Election and Appointment of Board Chair and Chair-Elect/Vice Chair, Board of Trustees Committee Assignments and NERC Officers

Mr. Thilly presented the recommendations for Board officers, NERC officers, and committee assignments. After discussion, and upon motion duly made and seconded, the Board approved the following resolutions:

RESOLVED, that the Board, upon recommendation of the Corporate Governance and Human Resources Committee ("CGHRC"), hereby elects the following officers of the Corporation for 2019:

- Roy Thilly, Chair
- Kenneth W. DeFontes, Chair-Elect/Vice Chair
- James B. Robb, President and Chief Executive Officer

FURTHER RESOLVED, that the Board, upon recommendation of the President and the CGHRC, hereby appoints the following individuals as officers of the Corporation for 2020:

- Sonia Mendonça, Senior Vice President, General Counsel, and Corporate Secretary
- Manny Cancel, Senior Vice President and Chief Executive Officer of the E-ISAC
- Mark G. Lauby, Senior Vice President and Chief Engineer
- Janet Sena, Senior Vice President and Director of Policy and External Affairs
- Howard Gugel, Vice President and Director of Engineering and Standards
- Stanley Hoptroff, Vice President, Chief Technology Officer, and Director of Information Technology
- Bill Lawrence, Vice President, ERO Enterprise Security Initiatives
- Andy Sharp, Vice President, Controller, and Interim Chief Financial Officer
- Mechelle Thomas, Vice President and Chief Compliance Officer



FURTHER RESOLVED, that the Board, upon recommendation of the CGHRC, hereby approves the 2019 Board Committee Assignments, as presented to the Board at this meeting.

Corporate Governance and Human Resources

George S. Hawkins, Chair Robert G. Clarke Kenneth W. DeFontes Colleen Sidford Roy Thilly, *ex officio*

Compliance Committee

Jan Schori, Chair George S. Hawkins Robin E. Manning Jim Piro Roy Thilly, *ex officio*

Enterprise-wide Risk

Colleen Sidford, Chair Robert G. Clarke Suzanne Keenan Robin E. Manning Jim Piro Roy Thilly, *ex officio*

ESCC Observer

Roy Thilly

MEC Liaison

Suzanne Keenan

Standards Liaison

Robin E. Manning

International Liaison

Colleen Sidford

New Member Mentor

Jan Schori

Finance and Audit

Robert G. Clarke, Chair Suzanne Keenan Robin E. Manning Jim Piro Roy Thilly, ex officio

Technology and Security

Suzanne Keenan, Chair Kenneth W. DeFontes Robin E. Manning Jan Schori Roy Thilly, ex officio

Nominating

Kenneth W. DeFontes, Chair Robert G. Clarke Suzanne Keenan Jim Piro Jan Schori Colleen Sidford Roy Thilly, ex officio



Board Self-Assessment and MRC Assessment of Board of Trustees Effectiveness Survey and Board Committee Self-Assessments

Mr. Thilly reported on the results of the recent Board of Trustees Self-Assessment, Member Representatives Committee ("MRC") Assessment of the Board of Trustees Effectiveness Survey, and the Board Committee Self-Assessments. No additional comments were provided from the Board.

Board Committee Reports

Corporate Governance and Human Resources Committee

Mr. DeFontes, Committee Chair, reported on the Committee's open meeting on February 5, 2020. He then presented the 2020 Work Plan Priorities. Mr. Lauby addressed a revision to the Supply Chain language. After discussion, and upon motion duly made and seconded, the Board approved the following resolution:

RESOLVED, that the Board, upon recommendation of the CGHRC, hereby approves the 2020 Work Plan Priorities, as presented to the Board at this meeting.

Compliance Committee

Ms. Shori, Committee Chair, reported on the executive meetings of the Committee on December 12, 2019 and February 4, 2020; and open meeting of the Committee held on February 5, 2020. She discussed the Committee's request to include Facility Ratings as a focus area in the 2019-2020 Compliance Committee Work Plan.

Finance and Audit Committee

Mr. Clarke, Committee Chair, reported on the open meeting held on February 5, 2020.

Mr. Clarke presented the 2019 Year-End Unaudited Results of Operations for the Board's acceptance. Upon motion duly made and seconded, the Board approved the following resolution:

RESOLVED, that the Board, upon recommendation of the Finance and Audit Committee, hereby accepts the 2019 NERC, Combined ERO Enterprise, and Regional Entity Unaudited Results of Operations, as presented to the Board at this meeting.

Enterprise-wide Risk Committee

Mr. Thilly, speaking on behalf of Mr. Goulding, Committee Chair, reported that the Committee met in closed session on February 4, 2020. At its meeting, the Committee reviewed: (i) the status of the 2019 audit plan; (ii) the status of the 2020 audit plan; (iii) the NERC Corporate Risk Register and Heat Map; and (iv) Compliance and Certification Committee ("CCC") activities.



Technology and Security Committee

Ms. Keenan, Committee Chair, reported that the Committee met in open session on February 5, 2020 to discuss items including: (i) ERO Enterprise Information Technology Strategy and IT Projects; and (ii) ERO Enterprise Security.

Nominating Committee

Mr. Hawkins, Committee Chair, expressed his thanks to the Committee and welcomed Mr. Piro as the new Trustee.

Report by Rob Manning on Standards Quarterly Activities

Mr. Manning reported on the recent Standards Committee meetings, including supply chain, cold weather, and cloud storage activities.

Standards Quarterly Report and Actions

Project 2017-07 Standards Alignment with Registration

Mr. Gugel presented the Project 2017-07 Standards Alignment with Registration, noting that the Reliability Standards were updated to reflect applicability adjustments resulting from the risk-based registration initiative. Upon motion duly made and seconded, the Board approved the following resolutions:

Proposed Reliability Standards

FAC-002-3 - Facility Interconnection Studies

RESOLVED, that the Board hereby adopts the proposed Reliability Standard FAC-002-3, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the proposed retirement of Reliability Standard FAC-002-2, as presented to the Board at this meeting.

IRO-010-3 - Reliability Coordinator Data Specification and Collection

RESOLVED, that the Board hereby adopts the proposed Reliability Standard IRO-010-3, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the proposed retirement of Reliability Standard IRO-010-2, as presented to the Board at this meeting.



MOD-031-3 – Demand and Energy Data

RESOLVED, that the Board hereby adopts the proposed Reliability Standard MOD-031-3, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the proposed retirement of Reliability Standard MOD-031-2, as presented to the Board at this meeting.

MOD-033-2 - Steady-State and Dynamic System Model Validation

RESOLVED, that the Board hereby adopts the proposed Reliability Standard MOD-033-2, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the proposed retirement of Reliability Standard MOD-033-1, as presented to the Board at this meeting.

NUC-001-4 – Nuclear Plant Interface Coordination

RESOLVED, that the Board hereby adopts the proposed Reliability Standard NUC-001-4, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the proposed retirement of Reliability Standard NUC-001-3, as presented to the Board at this meeting.

PRC-006-4 – Automatic Underfrequency Load Shedding

RESOLVED, that the Board hereby adopts the proposed Reliability Standard PRC-006-4, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the proposed retirement of Reliability Standard PRC-006-3, as presented to the Board at this meeting.



TOP-003-4 - Operational Reliability Data

RESOLVED, that the Board hereby adopts the proposed Reliability Standard TOP-003-4, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the proposed retirement of Reliability Standard TOP-003-3, as presented to the Board at this meeting.

Implementation Plan for Project 2017-07 Standards Alignment with Registration

FURTHER RESOLVED, that the Board hereby approves the associated implementation plan for the proposed Reliability Standards, as presented to the Board at this meeting.

Authorization

FURTHER RESOLVED, that NERC management is hereby authorized to make the appropriate filings with ERO governmental authorities and take such further actions and make such further filings as are necessary and appropriate to effectuate the intent of the foregoing resolutions.

PRC-024-3 – Frequency and Voltage Protection Settings for Generating

Mr. Gugel presented the proposed Reliability Standard, noting that the revisions address technical issues for inverter-based resources. Upon motion duly made and seconded, the Board approved the following resolutions:

RESOLVED, that the Board hereby adopts the proposed Reliability Standard PRC-024-3, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the associated implementation plan, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the proposed retirement of Reliability Standard PRC-024-2, as presented to the Board at this meeting.

FURTHER RESOLVED, that NERC management is hereby authorized to make the appropriate filings with ERO governmental authorities and take such further actions and make such further filings as are necessary and appropriate to effectuate the intent of the foregoing resolutions.



Reliability Standard TPL-007-4 – Transmission System Planned Performance for Geomagnetic Disturbance Events

Mr. Gugel presented the proposed Reliability Standard. Upon motion duly made and seconded, the Board approved the following resolutions:

RESOLVED, that the Board hereby adopts the proposed Reliability Standard TPL-007-4, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the associated implementation plan, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the proposed retirement of Reliability Standard TPL-007-3, as presented to the Board at this meeting.

FURTHER RESOLVED, that NERC management is hereby authorized to make the appropriate filings with ERO governmental authorities and take such further actions and make such further filings as are necessary and appropriate to effectuate the intent of the foregoing resolutions.

Regional Reliability Standard BAL-001-TRE-2 – Primary Frequency Response in the ERCOT Region Mr. Gugel presented the proposed Regional Reliability Standard. Upon motion duly made and seconded, the Board approved the following resolutions:

RESOLVED, that the Board hereby adopts the proposed Regional Reliability Standard BAL-001-TRE-2, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the associated implementation plan, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the Violation Risk Factors and Violation Severity Levels for the proposed Regional Reliability Standard, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the proposed retirement of Regional Reliability Standard BAL-001-TRE-1, as presented to the Board at this meeting.

FURTHER RESOLVED, that NERC management is hereby authorized to make the appropriate filings with ERO governmental authorities and take such further actions and make such further filings as are necessary and appropriate to effectuate the intent of the foregoing resolutions.



Other Matters and Reports

Policy Input and Member Representatives Committee Meeting

Mr. Thilly noted the discussion of policy input items and technical updates discussed at the MRC meeting.

Reliability and Security Technical Committee Membership

Mr. David Zwergel presented the recommendations for Sector representatives and At-Large representatives to the Reliability and Security Technical Committee ("RSTC"). After discussion, and upon motion duly made and seconded, the Board approved the following resolution:

RESOLVED, that the Board hereby appoints the following Sector representatives and At-Large representatives to the Reliability and Security Technical Committee ("RSTC") for the terms listed:

Sector Representatives	Sector Elected Members	
1. Investor-owned utility	Greg Stone (Duke Energy) – 2020-2023	
	Kayla Messamore (Evergy) – 2020-2022	
2. State/municipal utility	Saul Rojas (NYPA) – 2020-2023	
	Chris Shepherd (Gannett Fleming) – 2020-2022	
3. Cooperative utility	Marc Child (Great River Energy) – 2020-2023	
	Ben Engelby (Arizona G&T Cooperatives) – 2020-2022	
4. Federal or provincial	Edison Elizeh (Bonneville Power) – 2020-2023	
utility/Federal Power Marketing	Robert Reinmuller (Hydro One) – 2020-2022	
Administration		
5. Transmission dependent	John Stephens (City Utilities of Springfield) – 2020-2023	
utility	Carl Turner (Florida Municipal Power) – 2020-2022	
6. Merchant electricity	Allen Schriver (NextEra Energy) – 2020-2023	
generator	Sheranee Nedd (Public Service Enterprise Group) – 2020-	
	2022	
7. Electricity Marketer	Kyle Vander Helm (Tenaska, Inc.) – 2020-2023	
	Jodirah Green (ACES Power) – 2020-2022	
8. Large end-use electricity	John Hughes (Electricity Consumers Resource Council) –	
customer	2020-2023	
	Venona Greaff (Occidental Chemical) – 2020-2022	
9. Small end-use electricity	Darryl Lawrence (PA Office of Consumer Advocate) –	
customer	2020-2023	
	David Mulcahy (Modern Energy) – 2020-2022	
10. Independent system	Wesley Yeomans (NY Independent System Operator) –	
operator/ regional transmission	2020-2023	
organization	Christine Hasha (ERCOT) – 2020-2022	
12. State Government	Christine Ericson (Illinois Commerce Commission) – 2020-	
	2023	
	Cezar Panait (Minnesota Public Utilities Commission) –	
	2020-2022	



At-Large Nominees	Company and Terms
Patrick Doyle	Hydro Quebec – 2020-2023
David Jacobson	Manitoba Hydro – 2020-2023
Sandra Ellis	Pacific Gas & Electric Company – 2020-2023
Rich Hydzik	Avista – 2020-2023
Todd Lucas	Southern Company -2020-2023
Wayne Guttormson	Sask Power – 2020-2022
Lloyd Linke	WAPA, Upper Great Plains Region – 2020-2022
Brian Evans-Mongeon	Utility Service – 2020-2022
Jeff Harrison	Associated Electric Cooperative – 2020-2022
Peter Brandien	ISO NE – 2020-2022

EMP Report Recommendations

Mr. Gugel presented the Electromagnetic Pulse ("EMP") report recommendations, referencing the materials provided in the advance agenda package. After discussion, and upon motion duly made and seconded, the Board approved the following resolution:

RESOLVED, that the Board hereby approves the proposed EMP Task Force recommendations as proposed and prioritized by NERC staff.

Supply Chain Recommendations

Mr. Gugel presented the NERC staff recommendation to initiate a project to modify the Supply Chain Standards to include low impact BES Cyber Systems with remote electronic access connectivity. After discussion, and upon motion duly made and seconded, the Board approved the following resolution:

RESOLVED, that the Board hereby approves NERC staff's proposed recommendation to initiate a project to modify Reliability Standard CIP-003-8 to include policies for low impact BES Cyber Systems to: (1) detect known or suspected malicious communications for both inbound and outbound communications; (2) determine when active vendor remote access sessions are initiated; and (3) disable active vendor remote access when necessary.

FURTHER RESOLVED, that staff, working with stakeholders, will carefully evaluate the effectiveness and sufficiency of the supply chain standards and related actions and report to the Board every six months on this assignment, including identification of further actions, if any, needed to better address the risks identified on a cost-effective basis in light of the complexity and seriousness to the supply chain cyber threat environment as it evolves.

CCCPP-002 Compliance Monitoring Program for Reliability Standards Applicable to NERC – Retirement; and CCCPP-010 Criteria for Annual Regional Entity Program Evaluation Revisions

Ms. Jennifer Flandermeyer presented the retirement of CCCPP-002 and the revision of CCCPP-010 for the Board's approval. After discussion, and upon motion duly made and seconded, the Board approved the following resolutions:



RESOLVED, that the Board hereby approves the retirement of the Compliance and Certification Committee ("CCC") procedure document CCCPP-002, Compliance Monitoring Program for Reliability Standards Applicable to NERC, as presented to the Board at this meeting.

RESOLVED, that the Board hereby approves the revised CCC procedure document CCCPP-010, Criteria for Annual Regional Entity Program Evaluation, as presented to the Board at this meeting.

2019 and 2020 ERO Enterprise Dashboards

Mr. Coleman provided the 2019 ERO Enterprise Dashboard update. He reported on the Reliability Indicators included in the ERO Enterprise Dashboard. Mr. Coleman highlighted the primer, which describes each reliability indicator and key input of data to derive the results, as well as potential mechanisms for improving those results.

Reliability Coordinator Function in the Western Interconnection

Mr. Branden Sudduth, WECC Vice President of Reliability Planning and Performance Analysis, provided an update on recent developments regarding the Reliability Coordinator function in the Western Interconnection. He provided an update on the status of the transition of Reliability Coordinator services, reporting that on December 3, 2019, SPP became the final new Reliability Coordinator ("RC") of record and Peak Reliability ceased its RC services. Mr. Sudduth discussed WECC's plans for assurance visits regarding enhanced coordination among the RCs.

Committee Reports

Representatives of the Standing Committees provided reports to the Board highlighting items from their written reports, which had been included with the advance meeting materials.

Operating Committee

Mr. David Zwergel, Committee Chair, referenced the written report and highlighted certain items, including the Operating Committee's work to facilitate the transition to the proposed RSTC.

Planning Committee

Mr. Brian Evans-Mongeon, Committee Chair, referenced the written report and highlighted the Committee's ongoing work regarding Data Reporting Instructions and planning for the implementation of the RSTC.

Critical Infrastructure Protection Committee

Mr. Marc Child, Committee Chair, referenced the written report and highlighted the Committee's activities regarding cloud computing.

Reliability and Security Technical Committee

Mr. Greg Ford, Committee Chair, referenced the written report provided at the February 5, 2020 MRC meeting.

Member Representatives Committee

Ms. Jennifer Sterling, Committee Vice Chair, summarized the topics that had been discussed at the February 5, 2020 MRC meeting, highlighting the election of Trustees and cloud computing.



Personnel Certification Governance Committee

Mr. Cory Danson, Committee Chair, provided an update on the activities of the Committee, referencing the materials provided in the advance agenda package. He discussed the coordination with NERC staff on the modification to PER-003-2.

Standards Committee

Ms. Amy Casuscelli, Committee Chair, presented the Committee's 2020 Work Plan to the Board. Upon motion duly made and seconded, the Board approved the following resolution:

RESOLVED, that the Board hereby approves the Standards Committee 2020-2022 Strategic Work Plan, substantially in the form presented to the Board at this meeting.

Reliability Issues Steering Committee

Mr. Brian Slocum, Committee Vice Chair, provided an update on the activities of the Committee, referencing the materials provided in the advance agenda package. He highlighted the general qualifications required for nominees to the Committee.

Compliance and Certification Committee

Ms. Jennifer Flandermeyer, Committee Chair, referred to the written report included in the advance agenda package, highlighting the Alignment Working Group activities related to Align. She presented the Committee 2020 Work Plan. Upon motion duly made and seconded, the Board approved the following resolution:

RESOLVED, that the Board hereby approves the CCC 2020 Work Plan, substantially in the form presented to the Board at this meeting.

Electricity Subsector Coordinating Council

Mr. Robb reported on recent Electricity Subsector Coordinating Council activities.

Forum and Group Reports

North American Energy Standards Board (NAESB)

Mr. Jonathan Booe referenced the written report, noting that NERC and NAESB continue to collaborate on items of mutual interest. He reported that NAESB is collaborating with the NATF, including vendor certification in the supply chain.

North American Transmission Forum (NATF)

Mr. Thomas Galloway, NATF President and CEO, referenced the written report and highlighted certain items, including the Forum's collaboration on Facility Ratings and supply chain cyber security assessment. He highlighted the evolution of the NATF Peer Review program, and achieving the milestone of 100 completed peer reviews of reliability and security.



North American Generator Forum (NAGF)

Ms. Heather Morgan referenced the written report provided in the advance agenda. She discussed the NAGF's participation and support of the NERC Inverter-Based Resource Performance Task Force, and discussed NAGF's engagement with modifications to PRC-005-6 and NAGF's submitted comments regarding the Extreme Cold Weather Preparedness Standard Authorization Request ("SAR").

Adjournment

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

Submitted by,

Sônia Mendonça

Corporate Secretary



Agenda

Board of Trustees

February 6, 2020 | 8:30 a.m.-12:00 p.m. Pacific

(Please note the Schedule may be adjusted real-time should meetings conclude early and/or extend past their scheduled end time.)

westdrift Manhattan Beach, Autograph Collection

1400 Park View Avenue Manhattan Beach, California 90266

Conference Room: Loftlight - Lobby Level

Call to Order

NERC Antitrust Compliance Guidelines

Introductions and Chair's Remarks

Consent Agenda – Approve

- 1. Minutes*
 - a. December 12, 2019 Conference Call
 - b. November 5, 2019 Meeting
- 2. Committee Membership and Charter Amendments*
 - a. Reliability Issues Steering Committee Membership
 - b. Critical Infrastructure Protection Committee Membership
 - c. Personnel Certification Governance Committee Membership

Regular Agenda

3. Remarks and Reports

- a. Welcome Remarks Pedro Pizarro, President and CEO, Edison International
- b. Remarks by Neil Chatterjee, Chairman, FERC
- c. Remarks by Chuck Kosak, Deputy Assistant Secretary, DOE
- d. NIAC Update and Recommendations to the President, William Fehrman, Vice Chair, MEC
- e. Remarks by by David Morton, CAMPUT Representative to NERC
- f. President's Report
- g. Report on Board of Trustees January 13-14 and February 4, 2020 Closed Sessions and January 14-15 ISO New England Joint Board Meeting
- 4. Election and Appointment of Board Chair and Chair-Elect/Vice Chair, Board of Trustees Committee Assignments and NERC Officers Approve



5. Board Self-Assessment and MRC Assessment of Board of Trustees Effectiveness Survey and Board Committee Self-Assessments – Discussion

6. Board Committee Reports

- a. Corporate Governance and Human Resources
 - i. 2020 Work Plan Priorities Approve
- b. Compliance
- c. Finance and Audit
 - i. 2019 Year-End Unaudited Results of Operations Accept
- d. Enterprise-wide Risk
- e. Technology and Security
- f. Nominating
- g. Report by Rob Manning on Standards Quarterly Activities

7. Standards Quarterly Report and Actions*

- a. Project 2017-07 Standards Alignment with Registration Adopt
- b. Project 2018-04 Modifications to PRC-024-2 Adopt
- c. Project 2019-01 Modifications to TPL-007-4 **Adopt**
- d. BAL-001-TRE-2 Primary Frequency Response in the ERCOT Region Adopt

8. Other Matters and Reports*

- a. Policy Input and Member Representatives Committee Meeting **Discussion**
- b. Reliability and Security Technical Committee Membership*- Approve
- c. EMP Report Recommendations*-Approve
- d. Supply Chain Recommendations*– Approve
- e. CCCPP-002 Compliance Monitoring Program for Reliability Standards Applicable to NERC Retirement*– **Approve**
- f. CCCPP-010 Criteria for Annual Regional Entity Program Evaluation Revisions*– Approve
- g. 2019 and 2020 ERO Enterprise Dashboards* **Update**
- h. Reliability Coordinator Function in the Western Interconnection* Update

9. Committee Reports*

- a. Operating Committee
- b. Planning Committee
- c. Critical Infrastructure Protection Committee
- d. Reliability and Security Technical Committee
- e. Member Representatives Committee



- f. Personnel Certification Governance Committee
- g. Standards Committee
 - i. Standards Committee 2020 Work Plan Approve
- h. Reliability Issues Steering Committee
- i. Compliance and Certification Committee
 - i. Compliance and Certification Committee 2020 Work Plan Approve
- j. Electricity Subsector Coordinating Council

10. Forum and Group Reports*

- a. North American Energy Standards Board
- b. North American Transmission Forum
- c. North American Generator Forum

11. Adjournment

^{*}Background materials included.