

## Minutes Board of Trustees

May 11, 2017 | 8:30 a.m.–12:00 p.m. Central

The Ritz-Carlton, St. Louis  
100 Carondelet Plaza  
St. Louis, MO 63105

### 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 St. Louis, Missouri, on May, 11, 2017, at 8:30 a.m. Central, and a quorum was declared present. The agenda is attached as **Exhibit A**.

Present at the meeting were:

### Board Members

Roy Thilly, Chair  
Janice B. Case  
Gerald W. Cauley, President and Chief Executive Officer  
Robert G. Clarke  
Kenneth W. DeFontes, Jr.  
Frederick W. Gorbet  
David Goulding  
George S. Hawkins  
Deborah S. Parker  
Kenneth G. Peterson  
Jan Schori

### NERC Staff

Charles A. Berardesco, Senior Vice President, General Counsel, and Corporate Secretary  
Tina Buzzard, Associate Director  
Howard Gugel, Senior Director of Standards  
Stan Hoptroff, Vice President, Chief Technology Officer, and Director of Information Technology  
Scott Jones, Vice President, Corporate Treasurer and Director of Finance and Administration  
Mark G. Lauby, Senior Vice President and Chief Reliability Officer  
Ken McIntyre, Vice President and Director of Standards and Compliance  
John Moura, Director of Reliability Assessment and System Analysis  
Sonia Mendonça, Vice President, Deputy General Counsel and Director of Enforcement  
James Merlo, Vice President and Director of Reliability Risk Management  
Timothy E. Roxey, Vice President and Chief E-ISAC Operations Officer  
Marcus H. Sachs, Senior Vice President and Chief Security Officer  
Janet Sena, Senior Vice President and Director of Policy and External Affairs  
Michael Walker, Senior Vice President and Chief Financial and Strategic Development Officer

## **NERC Antitrust Compliance Guidelines**

Mr. Berardesco noted the public nature of the meeting and directed the participants' attention to the NERC Antitrust Compliance Guidelines, which had been included with the advance meeting materials.

## **Welcoming Remarks**

Mr. Thilly welcome all of the attendees, including Warner Baxter of Ameren, John McAvoy of Consolidated Edison, Pat Hoffman of the Department of Energy and David Ortiz of FERC. He thanked the hotel and NERC staff for all of their efforts in organizing the meetings. Mr. Thilly reported that before the open meeting, as is its custom, the Board met in closed session with NERC management, and subsequently in executive session without NERC management, to review NERC management activities.

## **Consent Agenda**

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

## **Minutes**

The draft minutes for the February 9, 2017 meeting were approved as presented to the Board at this meeting.

## **Committee Membership Appointments and Charter Revisions**

### ***Compliance and Certification Committee Membership***

**RESOLVED**, that the Board hereby approves the appointment of the following individuals to serve as Compliance and Certification Committee representatives, each for a term of three years:

- Sylvain Clermont of Hydro-Quebec, representing Federal/Provincial Utility/Power Authority
- Kevin Conway of Intellibind, representing Small End-Use Electricity Customer
- Jennifer Flandermeyer of Kansas City Power and Light, representing Southwest Power Pool Regional Entity
- Sylvia Parada Mitchell of Florida Power and Light Co, representing Merchant Electricity Generator

## **Regular Agenda**

### **Remarks by Warner Baxter, Chairman, President and Chief Executive Officer, Ameren Corporation**

Mr. Baxter provided background on St. Louis and its history, noting key community attributes and how Ameren supports the community. He discussed evolving technology and its importance to the St. Louis community. Mr. Baxter reviewed Ameren's support of diversity and inclusion initiatives. He provided background on recent flooding and Ameren's support of restoration efforts, stressing the importance of planning to prepare for such types of events. Mr. Baxter provided an overview of Ameren's businesses, focusing on transmission reliability, and discussed the vision and mission of Ameren and their importance to Ameren's employees. He noted the importance of NERC to the reliability and security of the grid, and

the collaborative efforts between industry and NERC. Mr. Baxter stated his belief that the grid will only increase in importance as the industry transforms.

**Remarks by Patricia Hoffman, Acting Assistant Secretary, Department of Energy**

Ms. Hoffman discussed the importance of industry leadership, with a particular focus on resiliency. On cybersecurity, DOE is focusing on information sharing and monitoring programs such as CRISP, while also considering a pilot program focused on operating systems. DOE is also examining supply chain vulnerabilities. Ms. Hoffman provided background current developments in Washington, including congressional hearings on issues such as EMP. She noted the executive orders that had been issued, including executive branch reorganization, regulatory reform and streamlining, and a review of the Clean Power Plan.

**E-ISAC Strategic Plan/Remarks by John McAvoy, Chair, E-ISAC Member Executive Committee**

Mr. Cauley introduced Mr. McAvoy, who was present in his role as chair of the E-ISAC Member Executive Committee (the “MEC”) and would be speaking after a presentation of the E-ISAC Strategic Plan that had been endorsed by the MEC. Mr. Sachs then presented the E-ISAC Strategic Plan, referencing the detailed material included in the advance agenda package and the presentation at the MRC the prior day. He provided background on the reasons for a long term strategic plan for the E-ISAC and its development with the MEC. He reviewed the vision, mission, values and goals set forth in the Plan, the proposed multi-year development of information sharing, analytics and engagement, the planning and budget processes, and resource implications focusing on staffing, technology and facilities. He then outlined next steps, which included requesting Board acceptance of the Strategic Plan, and then presentation of detailed resource requests with the MEC and the Board.

Mr. McAvoy provided the MEC’s endorsement of the strategic plan. He provided background on his various roles in the industry, and noted that security is an integral part of operations. Mr. McAvoy provided an analogy to the approach in the nuclear industry for security – shared responsibilities, information sharing, and focus on excellence. He noted the industry’s evolution to face the evolving threat environment. Mr. McAvoy thanked the Board for its prior acceptance of MEC recommendations. The MEC is confident that E-ISAC can become the indispensable source for the industry, and that the Strategic Plan is a path to that vision. Mr. McAvoy acknowledged the difficulty of obtaining new resources, but these resources are critical for future development of the E-ISAC.

Mr. Cauley stated he believed in the importance of moving the E-ISAC forward as outlined in the Strategic Plan. He provided two measures to evaluate if the E-ISAC is progressing: first, can the E-ISAC use data to provide actionable information to the industry in a robust way; and, second, will the industry trust the E-ISAC enough to collaborate and share information. Mr. Cauley stated that with increased resources, the E-ISAC must show results. He then moved acceptance of the Strategic Plan, noting that resource implications would be addressed in future budgets. The motion was seconded.

Ms. Parker stated she would abstain, given her recent addition to the Board and her lack of understanding of the business case at this point. Mr. Thilly noted that while the Board had agreed, when the MEC was formed, to generally defer to the MEC on resource recommendations, but that such deferral was subject

to the Board's duties. In his view, if the Board accepts the Plan, it will need to support future funding, if the activities under the Plan are progressing and enhancing the E-ISAC's value to industry.

After discussion, the following resolution was approved, with one abstention:

**RESOLVED**, that the Board of Trustees hereby accepts the E-ISAC Long-Term Strategic Plan, as presented to the Board at this meeting.

### **President's Report**

Mr. Cauley provided his report, beginning by referencing the modest growth budget that will be proposed, but noting that there will be a separate E-ISAC funding proposal, which will be relatively modest for the first year, but show additional growth over a multi-year period. He requested stakeholder feedback on the E-ISAC proposal – e.g., is it sufficiently clear what is going to be accomplished?

Mr. Cauley then turned to the development of a longer-term NERC strategic plan – the intent is to show how NERC will address the changing industry environment. The plan should contemplate a continued evaluation of existing reliability standards and full implementation of risk based CMEP. Assessments should become more focused and actionable. There will be a continued focus on cyber and physical security. There will also need to be a focus on enhancing ERO Enterprise productivity. Management intends to provide the plan for Board acceptance at the November meeting, which will allow for significant stakeholder input.

Mr. Cauley introduced Lane Lanford, representing the Regional Entity executives, who reported on key focus areas, including the continued enhancement of the three-year operational plan and focus on consistency.

### **Report on Board of Trustees and Regional Board Officer Joint Meeting**

Mr. Thilly reported on the joint Board/Regional Board office meetings, noting the importance of the meetings to enhance communications. There was a focus on continuing efforts on consistency and the development of operational and strategic plans.

### **Report on Board of Trustees April 18 and May, 9, 2017 Closed Sessions**

Mr. Thilly reported on the closed sessions. The April meeting was focused on NERC's business continuity plan, with Messrs. Goulding and DeFontes taking the lead on behalf of the Board to review NERC's plans and procedures. Mr. DeFontes commented on the strong management presentations and robust approach, and Mr. Goulding expressed his appreciation for the management's attention to this issue. At its May meeting, the Board focused on initial review of NERC's longer-term strategic plan. Mr. Thilly specifically requested that stakeholders provide feedback on the plan as it is posted for comment, and urged that such comments be as specific as possible, note areas that are not covered, and suggest priorities as appropriate.

### **Board Committee Reports**

Mr. Thilly noted that the Committee Chairs had provided reports at the MRC meeting, and suggested the reports focus on action items.

### **Corporate Governance and Human Resources Committee**

Mr. Clarke, Committee Chair, noted the Committee was recommending amendments to the NERC Governance Guidelines and the Employee Savings Plan. Upon motion duly made and seconded, the following resolutions were approved:

#### ***Governance Guidelines***

**RESOLVED**, that the Board of Trustees, upon recommendation of the Corporate Governance and Human Resources Committee, hereby approves the proposed amendments to the NERC Governance Guidelines, as presented to the Board at this meeting.

#### ***Employee Savings Plan***

**RESOLVED**, that the Board of Trustees, upon recommendation of the Corporate Governance and Human Resources Committee, hereby approves the proposed amendments to the Employee Savings Plan, as presented to the Board at this meeting.

### **Compliance Committee**

Ms. Case, Committee Chair, noted she had provided a comprehensive report at the MRC meeting.

### **Finance and Audit Committee**

Ms. Schori, Committee Chair, stated the Committee had two actions items for the Board – acceptance of the 2016 Audited Financial Statements and acceptance of the First Quarter 2017 Unaudited Statement of Activities. Upon motion duly made and seconded, the following resolutions were approved:

#### ***2016 Audit Financial Statements***

**RESOLVED**, that the Board, upon recommendation of the Finance and Audit Committee, hereby accepts the 2016 Audited Financial Statements, as presented to the Board at this meeting.

#### ***First Quarter 2017 Unaudited Statement of Activities***

**RESOLVED**, that the Board, upon recommendation of the Finance and Audit Committee, hereby accepts the NERC First Quarter 2017 Unaudited Statement of Activities, as presented to the Board at this meeting.

### **Enterprise-wide Risk Committee**

Mr. Goulding, Committee Chair, summarized the recent meeting of the Committee, including the review of progress on audits and other activities, an update on the five year audit plan for the Regional Entities, mitigation of key business risks, including the business continuity plan, and a CCC update.

### **Standards Oversight and Technology Committee**

Mr. Peterson, Committee Chair, noted there were no action items. He commented on the Committee's dual role in standards and technology. Mr. Peterson cited the progress on IT implementations,

emphasizing the efforts focused on registered entities and new CMEP technology, emphasizing the need for new CMEP tools. He reported on the progress of the supply chain standard and the upcoming posting of implementation guidance with the next draft of the standard.

### **Nominating Committee**

Mr. Gorbet reported on the commencement of work by the Committee, including the engagement of a recruiting firm and development of a position description.

### **Standards**

Mr. Gugel presented on the following Reliability Standards related project. After discussion, and upon motions duly made and seconded, the Board approved the following resolutions:

#### ***WECC Reliability Standards Development Procedures***

**RESOLVED**, that the Board hereby approves the proposed Western Electricity Coordinating Council Reliability Standards Development Procedures Revisions, 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 resolution

### **Other Matters and Reports**

#### **Sections 600 and 900 of the Rules of Procedure Amendments**

Mr. Gugel summarized the proposed amendments to the provisions of the Rules of Procedure for system operator certification and continuing education, noting this was part of a larger project to update the Rules of Procedure. He summarized all comments and responses. Mr. Cauley stated he supported the changes, but also suggested that Mr. Berardesco lead an update review of the overall operator certification program to provide assurance it was meeting all legal requirements. After discussion, and upon motion duly made and seconded, the following resolutions were approved:

**RESOLVED**, that the Board of Trustees hereby approves the proposed amendments to Sections 600 and 900 of the NERC Rules of Procedure, 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 resolution.

#### **2017 Summer Reliability Assessment**

Ms. Moura provided an update on the Summer Assessment report, referencing the material included in the advance agenda package. He reviewed key findings, including resource adequacy, management of renewables in over-supply conditions, the Aliso Canyon outage, solar inverter dynamics and disturbance performance, and the 2017 solar eclipse. Mr. Moura summarized the schedule for finalizing the report

and publication, noting that the Board had delegated approval of the final report to the Chief Executive Officer.

### **2017 State of Reliability**

Mr. Merlo provided an overview of the State of Reliability report, referencing the material included in the advance agenda package. He noted that data collection was complete, and that this report would include more data than any previous report. Mr. Merlo summarized several different findings, including the continued decline in misoperations rates. The final report will be submitted to the Board for acceptance in June.

### **Mexico Update**

Ms. Sena reviewed current activities with Mexico, including the execution of bilateral principles in January, execution of a Memorandum of Understanding in March, continued progress on a memorandum of agreement for WECC, and the upcoming meetings later this month. A joint Mexico/NERC steering committee has been formed, with the initial focus areas to be standards, reliability assessments, cyber security, governance and funding. Mr. Cauley noted that the Mexican authorities are very enthusiastic and want to move ahead quickly, but all parties need to be cognizant of the requirements of the Mexican statutory regime. It will likely be a multi-year effort to integrate Mexico into the NERC framework.

### **E-ISAC Quarterly Update**

Mr. Sachs presented the quarterly E-ISAC update, referencing the materials included in the advance agenda package, including various statistics, advisories and reports, a technology update, and a staffing update. He summarized several significant activities, including the E-ISAC strategic plan, GridEx IV, and the evolving relationship with the downstream natural gas ISAC.

### **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**

Jim Case, Committee Chair, referenced the written report. He expressed appreciation to the Board for their support of the Committee and attendance at meetings. Mr. Case noted specific Committee efforts such as issuing new and revised operating guidelines, working on the inverter issues with NERC staff, support of GridEx IV and industry outreach. Mr. Gorbet thanked the Committee for their industry outreach efforts.

### **Planning Committee**

Brian Evans-Mongeon, Committee Vice Chair, referenced the written report, and summarized key activities, including support of the State of Reliability and Summer Assessment reports, single point of disruption report, work on essential reliability services and distributed energy resources, and outreach to regulators.

### **Critical Infrastructure Protection Committee**

Marc Child, Committee Chair, summarized and highlighted portions of the written report, and thanked Mr. Lauby for attending the Committee's recent meeting.

### **Member Representatives Committee**

Jason Marshall, MRC Vice Chair, summarized the issues that had been discussed at the MRC meeting on the previous day.

### **Personnel Certification Governance Committee**

Brett Hallborg, Committee Chair, referenced the written report, highlighting key activities, including updating of exams, an enhanced database and a new strategic plan. He indicated his support of the proposed outside legal review of the overall operator certification program.

### **Standards Committee**

Brian Murphy, Committee Chair, noted that the written report had been reviewed the prior day. He affirmed the comments from the prior day about progress on the cyber security supply chain standard.

### **Reliability Issues Steering Committee**

Nelson Peeler, Committee Vice Chair, referenced the written report and noted the detailed discussion the prior day. Mr. Thilly thanked the Committee for their recent leadership summit.

### **Compliance and Certification Committee**

Patti Metro, Committee Chair, referenced the written report and noted the detailed discussions the prior day, including discussions on consistency efforts. She noted the Committee is working with NERC staff on entity registration and audits of the Regional Entities under the delegation agreements.

### **Electricity Subsector Coordinating Council**

Mr. Cauley reported that the ESCC would be meeting in June with the new administration officials.

### **Forum and Group Reports**

#### **North American Energy Standards Board (NAESB)**

Jonathan Booe, NAESB General Counsel, referenced the written report, noting the filing of the time error correction standard. He thanked NERC staff for their coordination with NAESB.

#### **North American Transmission Forum**

Tom Galloway, Forum CEO, referenced the written report and highlighted key focus areas and how they align with the RISC report. He thanked the NERC Board for their engagement with the Forum.

#### **North American Generator Forum**

Allen Shriver, Forum COO, noted a recent meeting with FERC staff on emerging reliability issues.

### **Closing Remarks**

Mr. Thilly thanked the staff for their support at this meeting, in particular Wanda Peoples

### **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

### Board of Trustees

May 11, 2017 | 8:30 a.m.–12:00 p.m. Central

The Ritz-Carlton, St. Louis  
100 Carondelet Plaza  
St. Louis, MO 63105

Conference Room: Ritz-Carlton Ballroom (Lobby Level)

#### Call to Order

#### NERC Antitrust Compliance Guidelines—Public Announcement

#### Introductions and Chair's Remarks

#### Consent Agenda - Approve

##### 1. Minutes\*

- a. February 9, 2017 Meeting

##### 2. Committee Membership and Charter Changes\*

- a. Compliance and Certification Committee Membership

#### Regular Agenda

##### 3. Remarks and Reports

- a. Welcome Remarks - Warner Baxter, Chairman, President and Chief Executive Officer, Ameren Corporation
- b. Remarks by Patricia Hoffman, Acting Assistant Secretary, DOE
- c. Remarks by Murray Doehler, Chair, CAMPUT
- d. John McAvoy, Chair, E-ISAC Member Executive Committee
- e. President's Report

##### 4. Report on Board of Trustees and Regional Board Officers Joint Meeting – Information

##### 5. Report on Board of Trustees April 18 and May 9, 2017 Closed Sessions – Information

##### 6. Board Committee Reports

- a. Corporate Governance and Human Resources
- b. Compliance
- c. Finance and Audit
  - i. 2016 Audited Financial Statement: Review Audit Findings and Recommendations – **Accept**

- ii. First Quarter 2017 Unaudited Statement of Activities – **Accept**
  - d. Enterprise-wide Risk
  - e. Standards Oversight and Technology
  - f. Nominating Committee
- 7. Standards\***
- a. WECC Reliability Standards Development Procedures – **Approve**
- 8. Other Matters and Reports\***
- a. Sections 600 and 900 of the Rules of Procedure Amendments – **Approve**
  - b. 2017 Summer Reliability Assessment – **Update**
  - c. 2017 State of Reliability – **Update**
  - d. Mexico Update and Next Steps 2017/2018 – **Update**
  - e. E-ISAC Quarterly Update – **Information**
    - i. E-ISAC Long-Term Strategic Plan – **Acceptance**
- 9. Committee Reports\***
- a. Operating Committee
  - b. Planning Committee
  - c. Critical Infrastructure Protection Committee
  - d. Member Representatives Committee
  - e. Personnel Certification Governance Committee
  - f. Standards Committee
  - g. Reliability Issues Steering Committee
  - h. Compliance and Certification Committee
  - i. 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.