Minutes
Board of Trustees
May 5, 2016 | 9:00 a.m.–12:00 p.m. Central

The Westin Chicago River North
320 N Dearborn Street
Chicago, IL 60654

Call to Order and Chair’s Remarks
Mr. Frederick W. Gorbet, Chair, called to order the duly noticed open meeting of the Board of Trustees ("Board") of the North American Electric Reliability Corporation ("NERC" or the "Corporation") in Chicago, Illinois on May 5, 2016, at 9:00 a.m. Central, and a quorum was declared present. The agenda is attached as Exhibit A.

Present at the meeting were:

Board Members:
Frederick W. Gorbet, Chair
Paul F. Barber
Janice B. Case
Gerald W. Cauley, President and Chief Executive Officer
Robert G. Clarke
Kenneth W. DeFontes, Jr.
David Goulding
Kenneth G. Peterson
Jan Schori
Roy Thilly

NERC Staff
Charles A. Berardesco, Senior Vice President, General Counsel, and Corporate Secretary
Tina Buzzard, Associate Director
Robert Goldfin, Associate Counsel
Howard Gugel, Director of Standards
Holly Hawkins, Associate General Counsel
Stan Hoptroff, Vice President and Chief Technology Officer
Mark G. Lauby, Senior Vice President and Chief Reliability Officer
Steven Masse, Senior Engineer
Sonia Mendonça, Vice President of Enforcement and Deputy General Counsel
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, Director of Policy and External Affairs  
Michael Walker, Senior Vice President, Chief Financial and Administrative Officer, and Treasurer

**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. He offered to answer any questions regarding antitrust compliance or other matters.

**Welcoming Remarks/ Executive Session**  
Mr. Gorbet welcomed attendees to the meeting. He 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. The Board also met with the Board leadership of the Regional Entities, in a regular semi-annual meeting, with a focus on assessing reliability for an evolving Bulk Power System, and the ERO Enterprise strategic planning framework.

Mr. Cauley also welcomed attendees to the meeting. He expressed his appreciation to Commissioner Cheryl LaFleur and Michael Bardee, Director of the Office of Electric Reliability, of the Federal Energy Regulatory Commission (FERC), for their attendance at the meeting.

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

**Minutes**  
The draft minutes for the February 11, 2016, meeting were approved in the form 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 as Chair and Co-Chair of the Compliance and Certification Committee (“CCC”), each for a term of two years beginning on July 1, 2016:

- Patti Metro, of National Rural Electric Cooperative Association, as CCC Chair
- Jennifer Flandermeyer, of Kansas City Power and Light, as CCC Co-Chair

**FURTHER RESOLVED,** that the Board hereby approves the reappointment the following individuals as members of the CCC, each for a term of three years:

- Ted E. Hobson of Jacksonville Electric Authority, representing the Florida Reliability Coordinating Council
- Shane Sanders of Southwest Transmission Cooperative, Inc., representing the Cooperative sector
Gregory Campoli of New York Independent System Operator, representing the ISOs/RTO sector
Mr. Shawn T. Abrams of South Carolina Public Service Authority, representing the State/Municipal sector
Mr. James Spearman of Public Service Commission of South Carolina, representing the U.S. State sector
Mr. Jim Stanton of Quanta Technology, representing the Small End-User sector

**Personnel Certification Governance Committee Charter and System Operator Certification Program Manual**

**RESOLVED**, that the Board hereby approves the revised Personnel Certification Governance Committee (“PCGC”) charter, substantially in the form presented to the Board at this meeting, to replace the PCGC charter approved by the Board on August 8, 2013.

**FURTHER RESOLVED**, that the Board hereby approves the revised System Operator Certification Program Manual, substantially in the form presented to the Board at this meeting, to replace the System Operator Certification Program Manual approved by the Board in February 2012 and updated in December 2014.

**Critical Infrastructure Protection Committee Membership and Charter**

**RESOLVED**, that the Board hereby approves the appointment of the following individuals to the Critical Infrastructure Protection Committee (“CIPC”), each for a term of two years:

- Damon Ounsworth of SaskPower, representing Midwest Reliability Organization
- Yan Hugues Boily of Hydro-Québec, representing Northeast Power Coordinating Council
- Mikhail Falkovich of Public Service Enterprise Group, representing ReliabilityFirst

**FURTHER RESOLVED**, that the Board hereby approves the revised CIPC charter, substantially in the form presented to the Board at this meeting, to replace the CIPC charter approved by the Board on November 7, 2013.

**Operating Committee Membership**

**RESOLVED**, that the Board hereby approves the appointment of the following individuals to the Operating Committee (“OC”), each for a term ending in September 2016:

- Michelle Rheault of Manitoba Hydro, representing Federal or Provincial Utility/Federal Power Marketing Administrations
- Mark Ennis of Alabama Municipal Electric Authority, representing Transmission Dependent Utilities
FURTHER RESOLVED, that the Board hereby approves the appointment of the following individual to the OC, for a term ending in September 2017:

- Robert Blohm of Keen Resources, representing Small End-Use Electricity Customers

Election and Appointment of NERC Officers

RESOLVED, that the Board, upon recommendation of the President and CEO and the Corporate Governance and Human Resources Committee, hereby appoints the following individuals as officers of the Corporation:

- Scott Jones, Vice President of Finance and Treasurer
- James Merlo, Vice President of Reliability Risk Management
- Ken McIntyre, Vice President of Standards and Compliance, effective June 1, 2016

Regular Agenda

Remarks by Commissioner Cheryl LaFleur, Federal Energy Regulatory Commission
Commissioner LaFleur expressed appreciation for the State of Reliability Report. She noted the 10-year anniversary of NERC as the ERO and of Reliability Standards being mandatory, and commended the ERO Enterprise and industry for the tremendous number of accomplishments, including, the development of the ERO Enterprise model, resolution on the definition of Bulk Electric System, a strong framework for standards development, tackling emerging challenges with a changing resource mix, grid security, and development of the geomagnetic disturbance standard. Commissioner LaFleur noted that, going forward, focus areas could include the further streamlining of the reliability standards and synergies between reliability standards and other efforts at NERC and FERC. She thanked Mr. Cauley for his efforts over the past six years, noting the stronger working relationship between FERC and the ERO Enterprise under his leadership.

Remarks by Anne Pramaggiore, President and CEO of ComEd
Ms. Pramaggiore welcomed the NERC Board and stakeholders to Chicago, and expressed her appreciation to her colleague Steve Naumann for suggesting Chicago as a location for a NERC quarterly meeting. She provided background on Exelon and the recent completion of Exelon’s acquisition of Pepco. Ms. Pramaggiore noted that as the industry becomes more digitized, utilities can work together to standardize practices and share information. She applauded the many NERC initiatives to share information with the industry, referencing as examples the NERC team dispatched to Ukraine after the December 2015 cyber-attack and the GridEx grid security exercises. Ms. Pramaggiore highlighted several aspects of ComEd’s multiyear grid modernization program, and noted ComEd’s focus on reliability and resiliency efforts. She described some of ComEd’s upcoming projects, as well as its partnerships with industry members to develop smart grid technologies.
Remarks by Liz Dalton, Principal Deputy Assistant Secretary, U.S. Department of Energy
Ms. Dalton thanked the Board for inviting her to speak. She highlighted key portions of the Highway and Transportation Funding Act of 2015, including the ability of the President of the United States to declare critical infrastructure locations, and the establishment of a research team to develop a strategic transformer reserve program. She urged the industry to provide feedback to the researchers to assist in the Department’s December 2016 report. She commented on the U.S./Canada joint strategy for resiliency of the grid. She also expressed appreciation for Mr. Cauley’s testimony in connection with the Department’s Quadrennial Energy Review.

President’s Report
Mr. Cauley provided his President’s report, noting that the NERC Board and management is well aware of the pressures on the NERC budget and that the organization is highly focused on controlling costs. He referenced the disconnect between NERC’s expenses and assessments and the need to better balance those on an ongoing basis, and noted management’s proposed use of the Assessment Stabilization Reserves would allow for a multi-year transition.

Mr. Cauley recognized the comments during the MRC meeting on NERC’s reliability assessment review process and content, noting the importance of technical review and the importance of the assessments on an ongoing basis, and committing to reviewing the timing for and number of assessments. He thanked Mr. Bardee for his update on FERC activities at the MRC meeting, and referenced the data sharing NOPR issued by the Commission and NERC’s approach to providing anonymized data.

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

Reliability Standards IRO-018-1 and TOP-010-1 – Real-time Reliability Monitoring and Analysis Capabilities

**RESOLVED**, that the Board hereby adopts proposed Reliability Standards IRO-018-1 and TOP-010-1, substantially in the form presented to the Board at this meeting.

**FURTHER RESOLVED**, that the Board hereby approves the associated implementation plan, substantially in the form 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 Standards, substantially in the form 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 PRC-012-2 – Remedial Action Schemes

RESOLVED, that the Board hereby adopts proposed Reliability Standard PRC-012-2, substantially in the form presented to the Board at this meeting.

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

FURTHER RESOLVED, that the Board hereby approves the proposed withdrawal of Reliability Standards PRC-012-1, PRC-013-1, and PRC-014-1, as presented to the Board at this meeting.

FURTHER RESOLVED, that the Board hereby approves the proposed retirement of Reliability Standards PRC-015-1 and PRC-016-1, 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.

Remedial Action Schemes (Revised Definition of Special Protection System)

RESOLVED, that the Board hereby adopts the proposed revised NERC Glossary definition of Special Protection System, substantially in the form presented to the Board at this meeting.

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

FURTHER RESOLVED, that the Board hereby approves the retirement of the existing NERC Glossary definition of Special Protection System, 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 PRC-002-NPCC-01 – Disturbance Monitoring (Retirement)

RESOLVED, that the Board hereby approves the retirement of Regional Reliability Standard PRC-002-NPCC-01, substantially in the form 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 BAL-004-0 – Time Error Correction (Information)
Mr. Gugel presented information on the retirement of Reliability Standard BAL-004-0.

Other Matters and Reports

Seasonal Assessments Delegated Authority to NERC Management
Ms. Hawkins reviewed Section 803 of the NERC Rules of Procedure, which specifies that NERC will produce three reports annually: Summer and Winter Reliability Assessment Reports, and a Long-Term Reliability Assessment Report. She presented a request from NERC management for the Board to delegate approval of the Summer and Winter Assessment Reports to NERC’s CEO. She noted that the Board would still approve the Long-Term Reliability Assessment Report and any other special assessment reports, as required by Section 803.

Mr. Cauley commented that NERC has transitioned to addressing individual major issues in special assessment reports, leading the Summer and Winter Reliability Assessment Reports to be primarily data-focused. Given this transition, management and the Board recommended that these Summer and Winter Reliability Assessment Reports be viewed as management activities, with the Board focused on those reports which include recommendations and other policy considerations. He noted that major concerns identified in the Summer and Winter Reliability Assessment Reports would still be presented to the Board as necessary. Mr. Thilly expressed his support for the proposal, with management identifying key issues to the Board and with continued engagement by the technical committees. Upon motion duly made and seconded, the following resolutions were approved:

WHEREAS, Section 803 of the NERC Rules of Procedure provide that NERC is to publish on an annual basis a Long-Term Reliability Assessment Report, Winter Reliability Assessment Report and a Summer Reliability Assessment Report, in each case subject to review and approval for publication by the Board;

WHEREAS, the NERC management is focusing the reliability assessment process on the timely release of relevant, topic-based reports that identify, evaluate, study, and independently assess emerging risks to reliability; and

WHEREAS, future Summer and Winter Reliability Assessment reports will be data-focused reviews of resource adequacy to meet projected peak demands ahead of the summer and winter seasons.

NOW, THEREFORE, BE IT RESOLVED, that the Board, hereby delegates to NERC’s Chief Executive Officer the authority to approve publication of future NERC Summer and Winter Reliability Assessment Reports.
FURTHER RESOLVED, that NERC management is hereby requested to provide a summary of the Summer and Winter Reliability Assessment Reports at the subsequent Board meeting after which any such Report is approved for publication.

FURTHER RESOLVED, that NERC management shall, as contemplated by Section 803 of the NERC Rules of Procedure, continue to submit to the Board for its approval for publication the annual Long-Term Reliability Assessment Report and any special reliability assessment reports subject to the Board approval requirements of Section 803 of the NERC Rules of Procedure.

Ms. Sena summarized the approach for the roll-out of the reports, noting that the outreach activity is dependent on the report topic, but that there is increasing interest in the NERC assessment reports.

ERO Enterprise Strategic Planning Framework
Mr. Gorbet noted the policy input on the ERO Enterprise Strategic Planning Framework and thanked stakeholders for their comments. He referenced the effort to simplify metrics and more closely align risks and NERC strategic initiatives and the annual business plan and budget. He urged the Regional Entities to adopt a similar approach.

Right-of-Way Assurance Project
Mr. Masse provided an overview of the Right-of-Way Assurance Project (the “ROW Project”), including on-site validation reviews of selected entities, identification and documentation of good utility practices and programs, and the release of a report containing the ROW Project’s findings. He emphasized that the ROW Project team was formed from staff throughout the ERO Enterprise and demonstrates the collaboration between the ERO Enterprise and industry. Mr. Gorbet said that the ROW Project is an excellent example of how the ERO Enterprise should work with industry. Mr. Cauley thanked Mr. Masse for his presentation, and noted that the ROW Project was a significant accomplishment for the ERO Enterprise.

Emerging ERO Programs: Advanced Analytics and Modeling
Mr. Lauby presented emerging programs related to NERC’s Reliability Assessment and Performance Analysis responsibilities, emphasizing the importance of strong models to predict the future at different time intervals, and for after-the-fact forensic analysis. He commented that NERC has worked closely with industry to develop and measure its models. Mr. Cauley noted that this was an example of the advanced analytics already being undertaken at NERC with existing resources.

E-ISAC Quarterly Update
Mr. Sachs reviewed key E-ISAC activities during first quarter 2016, including a significant rise in portal membership and an approximately 30 percent increase in reporting over the previous quarter. He discussed the NERC Alert regarding the December 2015 cyber-attack in Ukraine. He provided an update on the upgrades to the E-ISAC including facilities, staffing, and a new email domain.
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, highlighted key accomplishments set forth in the written report, including work on reliability guidelines.

Planning Committee
David Weaver, Committee Chair, summarized the written report, including the publication of Phase II of the Clean Power Plan study, work on the variable energy resources study, and initiatives by the Synchronized Measurement Subcommittee.

Critical Infrastructure Protection Committee
Marc Child, Committee Chair, summarized and highlighted portions of the written report, including NERC’s study of the December 2015 Ukraine cyber-attack, a report on GridEx III, and the July 1, 2016, start date for CIP Version 5.

Member Representatives Committee
Mr. Hitti, Committee Chair, summarized the issues that had been discussed at the MRC meeting on the previous day, specifically noting Mr. Bardee’s presentation.

Personnel Certification Governance Committee
Brett Hallborg, Committee Chair, summarized the written report, noting the Committee’s charter and manual approval at this meeting, and pass rates. In reference to system operator credential renewals, he requested the input of operators in developing additional questions for the Committee’s test bank.

Standards Committee
Brian Murphy, Committee Chair, referenced the written report and presentations at the Board committee and MRC meetings.

Reliability Issues Steering Committee
Peter Brandien, Committee Chair, summarized the written report, noting the Committee’s postponement of the Leadership Summit until early 2017.

Compliance and Certification Committee
Patti Metro, Committee Chair, referenced the written report, noting the continued work on potential updates to the Rules of Procedure and stakeholder survey.

Electricity Sub-Sector Coordinating Council
Mr. Cauley reported on the Council’s recent meeting with White House staff, and commented on the excellent coordination with the federal government.
Forum and Group Reports

North American Energy Standards Board
Johnathan Booe, reporting for Michael Deselle, referenced the written report, including continued work on time error correction, and expressed his appreciation to Messrs. Cauley and Lauby for the commitment to NAESB.

Regional Entity Management Group
Lane Lanford, Group Chair, referenced the written report, noting the continued focus on risk-based activities and on the development of oversight of Regional Entity activities. He stated that the Group will no longer report separately, but will be included in the President’s Report, reflecting the ongoing enhancement of ERO Enterprise coordination.

North American Transmission Forum
Tom Galloway, Forum CEO, referenced the Forum’s written report, noting the Forum’s Resiliency Summit, and a new program of member assistance.

North American Generator Forum
Allen Shriver, Forum CEO, referenced the written report, noting work on frequency response and an upcoming workshop with NERC.

Board Committee Reports

Corporate Governance and Human Resources Committee
Mr. Clarke, Committee Chair, summarized the Committee’s open and closed meetings that occurred prior to this meeting, noting that the Committee had reviewed the trustee compensation program and determined to make no changes to the multi-year phase-in of new compensation levels. The Committee was recommending minor changes to the Governance Guidelines. Upon motion duly made and seconded, the following resolution was approved:

RESOLVED, that the Board hereby approves the revised Corporate Governance and Human Resources Committee Mandate, as presented to the Board at this meeting.

Compliance Committee
Ms. Case, Committee Chair, summarized the recent closed, executive, and open sessions of the Committee. She expressed appreciation to Duke Energy and Xcel Energy for their presentations regarding their experiences in the Coordinated Oversight Program for multi-region registered entities.

Finance and Audit Committee
Ms. Schori, Committee Chair, reported on the Committee’s recent April 19, 2016, closed meeting to review assumptions used in the proposed budget for 2016, and requested Board acceptance of the first quarter statement of activities. Upon motion duly made and seconded, the following resolution was approved:
RESOLVED, that the Board, upon recommendation of the Finance and Audit Committee, hereby accepts the NERC First Quarter 2016 Unaudited Statement of Activities, as presented to the Board at this meeting.

Ms. Schori noted the Committee met with the external auditor, and requested Board acceptance of the audited financial statement for 2015. Upon motion duly made and seconded, the following resolution was approved:

RESOLVED, that the Board, upon recommendation of the Finance and Audit Committee, hereby accepts the 2015 Audited Financial Statement, as presented to the Board at this meeting.

Enterprise-wide Risk Committee
Mr. Goulding, Committee Chair, reported that the Committee had met in a closed meeting and received updates on the 2016 audit plan, NERC and ERO Enterprise risk management activities and the work of the CCC.

Standards Oversight and Technology Committee
Mr. Peterson, Committee Chair, reported on the Committee open meeting, which focused on IT projects and continued progress on reliability standards.

Nominating Committee
Mr. Peterson, Committee Chair, reported on the Committee’s initial formation and work, noting that Mr. Barber was not eligible for re-election but the three Board members whose terms were expiring had indicated a desire for re-election. After distribution of a request for proposal, the Committee unanimously designated Russel Reynolds Associates to act as its search advisor. Mr. Peterson also provided an overview of the schedule for the Committee’s work.

Closing Remarks
In his closing remarks, Mr. Gorbet expressed his appreciation to this meeting’s speakers for their attendance, and to NERC staff for the assessment reports which would be released in May 2016. He also thanked the MRC members and other stakeholders for their policy input, and thanked the NERC staff who had worked on the meetings.

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

Submitted by,

Charles A. Berardesco
Corporate Secretary