

# Agenda

## Member Representatives Committee

August 20, 2020 | 11:00 a.m. – 1:00 p.m. Eastern

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### Introduction and Chair's Remarks

### NERC Antitrust Compliance Guidelines and Public Announcement\*

### Consent Agenda

1. **Minutes - (Approve)**
  - a. May 14, 2020 Meeting\*
  - b. July 22, 2020 Conference Call\*

### Regular Agenda

2. **Future Meetings\***
3. **Schedule for MRC Officer and Sector Elections\***
4. **Election of NERC Trustee\* - (Elect)**
5. **General Updates and Reports**
  - a. Board of Trustees Nominating Committee Update\*
  - b. Business Plan and Budget Input Group Update\*
  - c. Regulatory Update\*
6. **Policy and Discussion Items**
  - a. NERC Bylaws Amendments\* - **(Approve)**
  - b. Responses to the Board's Request for Policy Input\*
    - i. E-ISAC Long-Term Strategic Plan
  - c. Additional Policy Discussion of Key Items from Board Committee Meetings\*
    - i. Corporate Governance and Human Resources Committee
    - ii. Technology and Security Committee
    - iii. Finance and Audit Committee
  - d. MRC Input and Advice on Board Agenda Items and Accompanying Materials\*

## Technical Updates

- 7. Update on FERC Reliability Matters\***
- 8. Cloud Computing\***

\*Background materials included.

# Antitrust Compliance Guidelines

## I. General

It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or that might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition.

It is the responsibility of every NERC participant and employee who may in any way affect NERC's compliance with the antitrust laws to carry out this commitment.

Antitrust laws are complex and subject to court interpretation that can vary over time and from one court to another. The purpose of these guidelines is to alert NERC participants and employees to potential antitrust problems and to set forth policies to be followed with respect to activities that may involve antitrust considerations. In some instances, the NERC policy contained in these guidelines is stricter than the applicable antitrust laws. Any NERC participant or employee who is uncertain about the legal ramifications of a particular course of conduct or who has doubts or concerns about whether NERC's antitrust compliance policy is implicated in any situation should consult NERC's General Counsel immediately.

## II. Prohibited Activities

Participants in NERC activities (including those of its committees and subgroups) should refrain from the following when acting in their capacity as participants in NERC activities (e.g., at NERC meetings, conference calls and in informal discussions):

- Discussions involving pricing information, especially margin (profit) and internal cost information and participants' expectations as to their future prices or internal costs.
- Discussions of a participant's marketing strategies.
- Discussions regarding how customers and geographical areas are to be divided among competitors.
- Discussions concerning the exclusion of competitors from markets.
- Discussions concerning boycotting or group refusals to deal with competitors, vendors or suppliers.
- Any other matters that do not clearly fall within these guidelines should be reviewed with NERC's General Counsel before being discussed.

### **III. Activities That Are Permitted**

From time to time decisions or actions of NERC (including those of its committees and subgroups) may have a negative impact on particular entities and thus in that sense adversely impact competition. Decisions and actions by NERC (including its committees and subgroups) should only be undertaken for the purpose of promoting and maintaining the reliability and adequacy of the bulk power system. If you do not have a legitimate purpose consistent with this objective for discussing a matter, please refrain from discussing the matter during NERC meetings and in other NERC-related communications.

You should also ensure that NERC procedures, including those set forth in NERC's Certificate of Incorporation, Bylaws, and Rules of Procedure are followed in conducting NERC business.

In addition, all discussions in NERC meetings and other NERC-related communications should be within the scope of the mandate for or assignment to the particular NERC committee or subgroup, as well as within the scope of the published agenda for the meeting.

No decisions should be made nor any actions taken in NERC activities for the purpose of giving an industry participant or group of participants a competitive advantage over other participants. In particular, decisions with respect to setting, revising, or assessing compliance with NERC reliability standards should not be influenced by anti-competitive motivations.

Subject to the foregoing restrictions, participants in NERC activities may discuss:

- Reliability matters relating to the bulk power system, including operation and planning matters such as establishing or revising reliability standards, special operating procedures, operating transfer capabilities, and plans for new facilities.
- Matters relating to the impact of reliability standards for the bulk power system on electricity markets, and the impact of electricity market operations on the reliability of the bulk power system.
- Proposed filings or other communications with state or federal regulatory authorities or other governmental entities.

Matters relating to the internal governance, management and operation of NERC, such as nominations for vacant committee positions, budgeting and assessments, and employment matters; and procedural matters such as planning and scheduling meetings.

# Draft Minutes

## Member Representatives Committee

May 14, 2020 | 11:00 a.m. – 1:00 p.m. Eastern

Chair Jennifer Sterling, with Vice Chair Paul Choudhury present, called to order a duly noticed meeting of the Member Representatives Committee (MRC) of the North American Electric Reliability Corporation (NERC) via teleconference on May 14, 2020, at 11:00 a.m., Eastern, and a quorum was declared present. The agenda and MRC members and their proxies in attendance are attached as **Exhibits A and B**, respectively.

### Introduction and Chair's Remarks

Ms. Sterling welcomed MRC members, acknowledging the NERC Board of Trustees (Board), Andy Dodge and others from the Federal Energy Regulatory Commission (FERC), State Commissioner Kate Bailey, CAMPUT representative David Morton, and Tab Gangopadhyay from the Canada Energy Regulator. Ms. Sterling reminded attendees that presentations conducted at the open Board committee meetings would not be repeated during the MRC meeting. She acknowledged the MRC's responses to the policy input request from Roy Thilly, Chair of the Board.

Ms. Sterling also noted that at the February meeting, the MRC agreed to form a sub-group to work with the Compliance and Certification Committee on the transition from the ERO Enterprise Effectiveness Survey. She asked MRC members interested in volunteering for the sub-group to contact herself, Mr. Choudhury, or Kristin Iwanechko.

### NERC Antitrust Compliance Guidelines and Public Announcement

Ms. Iwanechko directed the participants' attention to the NERC Antitrust Compliance Guidelines included in the agenda package, and indicated that all questions regarding antitrust compliance or related matters should be directed to Sonia Mendonca, senior vice president, general counsel, and corporate secretary at NERC.

### Minutes

Upon motion duly made and seconded, the MRC approved the minutes of the February 5, 2020, and April 15, 2020, meetings as presented at the meeting.

### Future Meetings

The schedule of future meeting dates, including the pre-meeting and informational webinars for 2020, was included in the agenda package. Mr. Thilly noted that the August Board, Board Committee, and MRC meetings will be converted to teleconference due to the COVID-19 pandemic.

### Board of Trustees Nominating Committee Update

Ken DeFontes, chair of the Board of Trustees Nominating Committee (BOTNC), noted that the BOTNC met in closed session on May 11, 2020, with the search firm for the Canadian trustee to review a short list of

impressive candidates to fill the vacancy resulting from Dave Goulding's retirement. The BOTNC determined a final set of candidates for interviews on June 16 and 17, 2020, with a recommendation for a final candidate slated for approval at the August MRC meeting.

In addition, the BOTNC met in a separate closed session on May 11, 2020, with a different search firm to begin the search to replace Jan Schori whose fourth and final term will expire in February 2021. A public announcement for the opportunity to suggest candidates will be sent the week of May 18, 2020.

### **Business Plan and Budget Input Group Update**

Sylvain Clermont, chair of the Business Plan and Budget Input Group, provided an update on the group's activities. During the group's most recent call, they reviewed the status of the 2021 business plan and budget development, as well as the funding strategy for Align and the ERO Secure Evidence Locker (ERO SEL). He thanked NERC for their continued transparency through the business plan and budget development process.

### **Regulatory Update**

Ms. Mendonca invited questions or comments regarding the regulatory report, which highlights Canadian affairs, as well as past and future significant FERC filings.

### **MRC Self-Assessment and MRC Effectiveness Survey Results Update**

Ms. Sterling provided an update on progress toward addressing the focus areas identified from the MRC self-assessment and MRC effectiveness survey, both issued in early 2019. She highlighted the following:

- Working with Mr. Clermont to document the Business Plan and Budget Input Group's responsibilities;
- Improved internal communications;
- Improved MRC agenda planning and management, with a shift to separating the business items from the technical items and adjusting the time of the MRC meetings based on the agenda items;
- Increased focus during the New Member Orientation on meeting preparation, encouraging balanced participation, and outside influences; and
- Determination that holding a joint closed meeting with the Board and MRC would not be practical unless there was a particular topic that would warrant a closed session per the NERC Bylaws.

Ms. Sterling stated that for the next survey, she will work with Mr. Choudhury and Ms. Iwanekko to streamline the surveys, potentially with the MRC completing a self-assessment and the Board and NERC management completing an effectiveness survey for a 360 view. MRC members are encouraged to share other ideas for streamlining these surveys.

### **Responses to the Board's Request for Policy Input**

Ms. Sterling acknowledged the MRC's responses to Mr. Thilly's April 15, 2020, letter requesting policy input on the Align tool delay and establishment of the ERO SEL, in addition to the preliminary agenda topics for the May meetings. Responses to the letter are [posted](#) with the Board agenda materials on the NERC website.

### **Align Tool Delay and Establishment of Secure Evidence Locker System**

Presentations regarding Align and the ERO SEL were given at the Technology and Security Committee and Finance and Audit Committee meetings the previous day. Board members acknowledged the importance of these projects and working collaboratively to ensure success. Ms. Sterling opened the meeting to additional discussion on this topic and the policy input submitted.

- An MRC member suggested the need to set up a process for involving entities in discussions regarding Align and the ERO SEL going forward when those entities may be limited in their ability to sign non-disclosure agreements due to sunshine laws. NERC staff acknowledged this concern and is working on a strategy to allow those groups to participate via an updated non-disclosure agreement process.
- An MRC member requested clarification on what sensitive information should and should not be included in the ERO SEL. Mechelle Thomas stated that the ERO SEL is designed to accommodate all sensitive information securely, but NERC has developed a list of sensitive data for which an exception process would apply upon request by a registered entity. This process is in development and NERC will share additional details as appropriate within the next few months.
- An MRC member asked how NERC will ensure that it and the Regional Entities are aligned on how the system will be used. Ms. Thomas and Stan Hoptroff stated that harmonization and training efforts with the Regional Entities are underway.
- An MRC member asked about expectations for registered entity provided lockers. Mr. Hoptroff stated that functional specifications are posted on the NERC website for those registered entities that choose to provide their own SEL. He also offered to have individual conversations with any registered entity that is interested.
- An MRC member asked whether registered entities would be notified when an action is taken (e.g., access, destruction) on information included in the ERO SEL. Mr. Hoptroff stated that NERC is looking into that capability.

### **Additional Policy Discussion of Key Items from Board Committee Meetings**

Attendees did not have any additional comments related to the Board's Corporate Governance and Human Resources Committee, Technology and Security Committee, and Finance and Audit Committee meetings.

### **MRC Input and Advice on Board Agenda Items and Accompanying Materials**

Attendees did not have any comments on the items on the Board's agenda following the MRC meeting.

### **Update on FERC Reliability Matters**

Andy Dodge, director of the Office of Electric Reliability at FERC, provided an update on the following FERC reliability activities: Commission actions on the COVID-19 pandemic; FERC/NERC guidance to ensure reliability amid potential coronavirus impacts; further Commission action to prioritize and provide regulatory relief; Order granting deferred implementation of certain NERC Reliability Standards; Notice of Inquiry regarding virtualization and cloud services for power grid operations; delays on reliability and security related actions; Notice of Proposed Rulemaking regarding transmission incentives; May 4, 2020, technical conference on storage as a transmission only resource; and upcoming conferences and Commission meetings.

### **Update on Cloud Computing**

Lonnie Ratliff, senior manager, cyber and physical security assurance at NERC, highlighted the FERC Notice of Inquiry issued seeking benefits and risks with virtualization and cloud services. He discussed the proliferation of cloud computing projections, potential security risks, and ongoing compliance activities and coordination related to the current and developing CIP standards. In particular, Mr. Ratliff focused on the storage of BES Cyber System Information (BCSI), use of cloud-based service models, cloud-focused future, and future Critical Infrastructure Protection (CIP) Reliability Standards development.

### **2020 Summer Reliability Assessment Preview**

John Moura, director, reliability assessments at NERC, provided an overview of the *Pandemic Preparedness and Operational Assessment – Spring 2020* that was developed and recently published as a bridge to the 2020 Summer Reliability Assessment (SRA). He reviewed the pandemic and mitigation strategy risks and NERC's pandemic response in five areas: E-ISAC, NERC alerts, reliability assessments, industry coordination, and compliance and FERC coordination.

Mr. Moura highlighted the preliminary key findings of the SRA: (1) sufficient resources, but a need to monitor outages; and (2) demand uncertainty. He also discussed 2020 summer reserve margins, operating challenges during the pandemic, and wildfire risk. Mr. Moura indicated that an embargoed report will be distributed to the Board and MRC on May 27, 2020, after endorsement from the Planning Committee and approval from NERC Executive Management. NERC expects to release the report on June 2, 2020.

### **2020 State of Reliability Preview**

Mr. Moura provided a preview of the 2020 State of Reliability Report, which is intended to offer objective, credible, and concise information to policy makers, industry leaders, and the Board on issues affecting the reliability and resilience of the North American bulk power system (BPS). He reviewed the preliminary key findings: (1) improved reliability in 2019; (2) no category 3, 4, or 5 events; (3) frequency response is stable or improving; (4) conventional generation forced outage rate is down; (5) slight uptick in the number of Energy Emergencies; (6) improved protection system misoperations rate; and (7) extreme events caused by winter weather and fire are the most severe to the BPS. Mr. Moura also provided an overview of the information in each of the sections of the report: (1) By the Numbers: The North American BPS; (2) Events Analysis Review; (3) Reliability Indicators; (4) Severity Risk Index and Component Analysis; and (5) Trends in Priority Reliability Issues. An embargoed report will be distributed to the Board and MRC on or about July 9, 2020. NERC staff is scheduled to present the report to the Board for acceptance on July 23, 2020, with a targeted release date of July 30, 2020.

### **Adjournment**

There being no further business, the meeting was adjourned.

Submitted by,



Kristin Iwanechko  
Secretary



# **DRAFT** Minutes

## Member Representatives Committee Pre-Meeting Informational Session Conference Call and Webinar

July 22, 2020 | 11:00 a.m. – 12:00 p.m. Eastern

### **Introduction and Chair's Remarks**

Chair Jennifer Sterling convened a duly-noticed open meeting by conference call and webinar of the North American Electric Reliability Corporation (NERC) Member Representatives Committee (MRC) on July 22, 2020, at 11:00 a.m., Eastern. The meeting provided the MRC and other stakeholders an opportunity to preview proposed agenda topics for the MRC, Board of Trustees (Board), and Board Committee meetings scheduled to be held August 19-20, 2020, via teleconference. The meeting announcement and agenda are attached as **Exhibits A and B**, respectively.

### **NERC Antitrust Compliance Guidelines and Public Announcement**

Kristin Iwanechko, MRC Secretary, 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 Sonia Mendonca, senior vice president, general counsel, and corporate secretary at NERC.

### **Schedule of Quarterly NERC Meetings and Conference Calls**

The draft schedule of events for the upcoming meetings was included in the agenda package.

### **Review of Proposed Board and Board Committees Meeting Agenda Items**

Ms. Mendonca reviewed the preliminary agenda items for the Board and Board Committee meetings scheduled for August 19-20, 2020, that were identified in the slide presentation included in the informational session agenda package. MRC members should review all agenda materials for the Board and Board Committee meetings, once posted and available, and attend as many of these meetings as possible in advance of the MRC's meeting on August 20, 2020.

### **Review of Proposed MRC Agenda Items for August 20, 2020**

Ms. Sterling reviewed the following preliminary MRC agenda items for the upcoming August 20, 2020, meeting that were identified in the slide presentation included in the informational session agenda package:

- Board of Trustees Nominating Committee update;
- Business Plan and Budget Input Group update;
- Regulatory update;
- Approval of NERC Bylaws Amendments;

- Discussion of the responses submitted to the policy input request from the Board;
  - E-ISAC Long-Term Strategic Plan;
- Additional discussion of the items presented at the Board Committee meetings;
- MRC input and advice on Board agenda items and accompanying materials;
- Update on FERC Reliability Matters; and
- Update on Cloud Computing.

### **Policy Input Reminder**

Ms. Sterling announced that the Board's request for policy input was released on July 15, 2020, and responses are due by Wednesday, August 5, 2020, to Kristin Iwanechko, committee secretary. Ms. Sterling noted that the Board requested input on the Electricity Information Sharing and Analysis Center (E-ISAC) Long-Term Strategic Plan. Manny Cancel, senior vice president and chief executive officer of the E-ISAC, provided an overview of the E-ISAC Long-Term Strategic Plan update.

The Board also requested input on the preliminary agenda topics presented during the MRC Informational Session. There will be time dedicated on the MRC's August 20, 2020, agenda for MRC members to provide input and advice on the Board agenda items after the final package has been posted.

### **Informational Items**

Ms. Mendonca provided an overview of the NERC Bylaws amendments, which the Board and MRC will be requested to approve at their August meetings.

### **Proxy Reminder**

Proxy notifications for the August 20, 2020, meeting must be submitted in writing to Ms. Iwanechko.

### **Meeting Adjourned**

There being no further business, the call was terminated.

Submitted by,



Kristin Iwanechko  
Secretary

## Future Meetings

### Action

Information

### Summary

The following are the future meeting dates for 2020 and 2021. The dates for 2020 pre-meeting and information webinars are also included below.

### 2020 Dates

October 7	Pre-Meeting and Informational Session
November 4-5	Teleconference

### 2021 Dates

February 3-4	Manhattan Beach, CA
May 12-13	Washington, DC
August 11-12	Vancouver, Canada
November 3-4	TBD

## **Schedule for MRC Officer and Sector Elections**

### **Action**

Information

### **Background**

Chair Jennifer Sterling will announce the upcoming nomination and election cycle for the Member Representatives Committee (MRC) officers and those members whose terms expire in February 2021. The tentative schedule is shown below.

### **MRC Officer Elections**

Wednesday, September 9 – nomination period opens

Friday, October 9 – nomination period closes

Thursday, November 5 – election of officers for following year by current MRC members

### **MRC Member Sector Nominations and Elections**

Tuesday, September 8 – nomination period opens

Friday, November 6 – nomination period closes

Monday, December 7 – election begins

Thursday, December 17 – election ends

### **Reference Links**

[Membership of the MRC for 2020-2022](#)

[NERC Bylaws](#)

## **Election of NERC Trustee**

### **Action**

Elect Jane Allen to the NERC Board of Trustees (Board) to fill the Canadian vacancy with a term concluding in February 2022.

### **Background**

Election of the Trustees of the Corporation is governed by Section 5 and 6 of Article III of the [Bylaws](#). The details are provided in the attached report. Ken DeFontes, chair of the Board's Nominating Committee, will present the enclosed report.

### **Attachment**

1. Report of the Nominating Committee to the Member Representatives Committee

# Report of the Board of Trustees Nominating Committee to the Member Representatives Committee

## July 23, 2020

The Nominating Committee of the Board of Trustees (Board) for the North American Electric Reliability Corporation (NERC) recommends the following nominee for election to the NERC Board of Trustees at the Meeting of the Member Representatives Committee (MRC) on August 20, 2020:

### **Class of 2022:**

**Jane Allen**

This report includes a brief biography of the nominee.

### **Members of the Nominating Committee**

The Nominating Committee consists of independent NERC Trustees Kenneth W. DeFontes (Committee Chair), Robert G. Clarke, Suzanne Keenan, James Piro, Jan Schori, Colleen Sidford, and Roy Thilly, as well as MRC members Jennifer Sterling (MRC Chair), Paul Choudhury (MRC Vice Chair), Peter Gregg, Roy Jones, and Jason Marshall.

### **Background**

Article III of NERC's Bylaws establishes the qualifications and sets the nomination and election procedures for members of NERC's Board of Trustees. NERC's independent trustees serve staggered three-year terms, and an election of trustees occurs at the Annual Meeting of the MRC each year (February), or as deemed necessary based on special circumstances. With the resignation of David Goulding from the Board effective January 1, 2020, the Nominating Committee commenced an expedited search for a Canadian Trustee to complete Mr. Goulding's term ending in February, 2022, that would have the Canadian Trustee candidate selected and recommended for approval by the MRC at its August 2020 meeting.

All independent trustees are to be elected from nominees proposed by the Nominating Committee. A nominee shall be elected an independent trustee if such person receives the affirmative vote of two-thirds of the members of the MRC. Each nominee receiving the necessary two-thirds vote of the MRC shall take office immediately upon election.

### **Committee Process**

The Committee retained the services of the Board and executive search firm Odgers Berndtson to assist in the search and evaluation of candidates to fill the open trustee position. As directed by the Bylaws, the Nominating Committee provided an opportunity for stakeholders to suggest trustee candidates. The Committee received many excellent suggestions and, working with Odgers Berndtson, was pleased to have an excellent list of candidates from which to choose. With the assistance of Odgers Berndtson, the Committee reviewed the background of each candidate, screened the candidates for possible conflicts of interest, and interviewed a total of six candidates. In developing its approach to fill the open trustee position, the Committee noted the attributes each of the current members of the Board of Trustees bring to the Board.

As set forth in this report, the Nominating Committee unanimously recommends Jane Allen for election to the NERC Board of Trustees to complete the term concluding in February, 2022.

### **Trustee Succession**

The Board of Trustees has adopted a policy statement on trustee succession as set forth in the NERC Governance Guidelines, and the Nominating Committee has followed that policy in making the nominations. The policy statement directs the Nominating Committee to observe the following guidelines in proposing nominees to serve as independent trustees:

- Each year the Nominating Committee should include in its report to the Member Representatives Committee a calculation of the average tenure of the independent trustees. The Nominating Committee should endeavor to keep the average tenure of independent trustees below six years.<sup>1</sup>
- To the extent feasible, the Nominating Committee should determine prior to soliciting suggestions for candidates whether the Committee expects that one or more incumbent trustees will not be re-nominated.
- No independent trustee may be re-nominated or reappointed after he or she has served on the Board for twelve consecutive years, unless at least one year has elapsed between the end of service on the Board and the subsequent re-nomination or reappointment.

Assuming the election of the nominee, as of August 2020 the average tenure of all independent trustees would be 4.1 years.

### **Biography of the Nominee**

#### ***Jane Allen***

Jane is an experienced Board Director, Management Consultant, and former Utility Executive.

Jane had a distinguished 20-year career at Deloitte, where she was the Partner in charge of the power and utilities management consulting practice, and led the renewable energy practice worldwide. Her expertise is in corporate strategy and implementing large scale transformational change, as well as governance of complex organizations. Jane served on Deloitte's Management Committee and Board of Directors, and was

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<sup>1</sup> The calculations also include any service on the board of the North American Electric Reliability Council.

Deloitte's first Chief Diversity Officer, establishing a number of important award-winning programs to advance diversity and inclusion in the firm and in the broader business community.

After retiring from Deloitte, Jane joined Hydro One, as Senior-Vice President, Strategy & Innovation. She was responsible for guiding the strategic direction of the company and leading its innovation agenda. She developed new revenue streams, including an electric vehicle charging network and a behind-the-meter power generation offering for commercial and industrial customers.

Jane has been a Board member of many organizations, including the Energy Council of Canada McMaster University, Oakville Enterprises/Oakville Hydro, Ontario Centres of Excellence, and the National Ballet of Canada.

She earned Master of Arts and Bachelor of Arts, summa cum laude, degrees from McMaster University and attended executive programs at the International Institute for Management Development in Lausanne, Switzerland, and the Rotman School of Business.

She received the Catalyst Canada Honours Award for Diversity Leadership, the YWCA Woman of Distinction Award for Corporate Leadership, and was named one of Canada's Top 100 Most Powerful Women and Top 25 Most Influential Women for multiple years.



## **Board of Trustees Nominating Committee Update**

### **Action**

Information

### **Summary**

The following MRC members are serving on this year's Board of Trustees Nominating Committee (BOTNC):

1. **Jennifer Sterling** – MRC Chair
2. **Paul Choudhury** – MRC Vice Chair
3. **Peter Gregg** – ISO/RTO
4. **Roy Jones** – State/Municipal Utility
5. **Jason Marshall** – Cooperative Utility

Ken DeFontes, chair of the BOTNC, will provide a status report on the planned activities and schedule for the BOTNC.

## **Business Plan and Budget Input Group Update**

### **Action**

Information

### **Summary**

The Business Plan and Budget (BP&B) Input Group was established as a means of getting MRC and stakeholder feedback toward each year's budget. The group meets at least once per month during the normal budget season and additionally in other months to receive updates on NERC's financial position and discuss upcoming budget strategies. The following MRC members are serving on this year's BP&B Input Group:

1. **Sylvain Clermont (Chair)** – Federal/Provincial Utility
2. **Jennifer Sterling** – MRC Chair
3. **Thad Ness** – Investor-Owned Utility
4. **Carol Chinn** – State/Municipal Utility
5. **Lloyd Linke** – Federal/Provincial Utility
6. **Bill Gallagher** – Transmission-Dependent Utility
7. **John Twitty** – Transmission-Dependent Utility

In addition to the above MRC members, the BP&B Input Group also includes a representative from a Regional Entity (Ed Schwerdt – NPCC) and a representative from the RISC (Peter Brandien – past RISC chair).

Sylvain Clermont, chair of the BP&B Input Group, will provide an update on behalf of the group at the August 20, 2020, MRC Meeting.

## Update on Regulatory Matters (As of July 10, 2020)

### Action

Information

### Background

*FERC Orders Issued since the Last Update*

FERC orders are available on the NERC website [FERC Orders/Rules](#) page.

*NERC Filings to FERC since the Last Update*

NERC filings to FERC are available on the NERC website [NERC Filings to FERC](#) page.

*NERC Filings in Canadian Jurisdictions since the Last Update*

NERC filings to Canadian applicable governmental authorities are available on the NERC website [Canadian Filings and Orders](#) page. This page also contains links to the websites of each of the Canadian applicable governmental authorities, where orders, consultation records, and other records related to NERC matters may be found.

Processes for making standards enforceable and monitoring and enforcing compliance are specific to each jurisdiction in Canada. The Federal, Provincial, and Territorial Monitoring and Enforcement Sub-group (MESG) has developed provincial summaries of each province's electric reliability standard-making and enforcement functions, with U.S. comparators. The [Canada](#) page of the NERC website contains these summaries, as well as a link to the [Canadian MOUs](#) page.

### Anticipated NERC Filings in Q3

Highlights of NERC filings that will be submitted to applicable governmental authorities in the U.S. and Canada appear below:

1. August 14, 2020 — Within 45 days of the end of each quarter, NERC must submit the unaudited report of the NERC budget-to-actual spending variances during the preceding quarter. *Docket No. FA11-21-000*
2. August 24, 2020 — NERC will submit the Annual Business Plans and Budgets of NERC and the Regional Entities.
3. August 29, 2020 — Within 60 days of the end of each quarter, NERC must submit a quarterly filing in Nova Scotia of FERC-approved Reliability Standards.
4. September 17, 2020 — NERC will submit an update on the schedule for the 2016-02 (Virtualization) and 2019-02 (BCSI) CIP standards development projects. *Docket No. RD20-2-000*

5. September 20, 2020 — NERC will submit proposed Reliability Standard PRC-006-5. It adds a regional variance for the WECC region. *Pending Board Approval*
6. September 28, 2020 — Second Compliance Filings in response to FERC's Order on NERC's Five Year Performance Assessment. *Docket No. RR19-7-001*
  - NERC will submit Revisions to Section 500 and Appendices 2, 5A, 5B, and 5C (Registration and Certification). *Pending Board Approval*
  - NERC will submit revised Sanction Guidelines pursuant to FERC Five Year Performance Assessment Order. *Pending Board Approval*
  - NERC will submit Revisions added revisions to Section 1003 (E-ISAC) of the ROP. *Pending Board Approval*
7. September 28, 2020 — NERC will submit the Annual Report of NERC on Wide-Area Analysis of Technical Feasibility Exceptions (TFEs). *Docket No. RR10-1-001*

## **Proposed Amendments to the North American Electric Reliability Corporation's Bylaws**

### **Action**

Approve

### **Background**

Since NERC became the Electric Reliability Organization (ERO), in 2006, the NERC Bylaws (Bylaws) have been in place largely in their current format. Recent discrete changes to the Bylaws have focused on clarifications of certain requirements, introduction of necessary flexibility, and elimination of outdated language and references.<sup>1</sup>

At the request of the NERC Board of Trustees (Board), NERC management comprehensively reviewed the Bylaws and identified potential revisions to clarify certain requirements, incorporate the Board's feedback on certain governance matters, improve internal document consistency, and align certain provisions with applicable law. The proposed revisions are described below. These revisions also reflect input provided by stakeholders over the course of outreach conducted by NERC and the Member Representatives Committee (MRC) leadership. The proposed revisions do not affect NERC's qualifications or ability to function as the ERO as set forth in section 215 of the Federal Power Act.

Pursuant to Article XIV of the Bylaws, these revisions are subject to approval by the Board, the MRC, and the Federal Energy Regulatory Commission (FERC). NERC management intends to submit the proposed revisions to the Board and MRC at their respective August 2020 meetings and, upon approval, to FERC soon thereafter.

### **Overview**

The two primary areas of revisions relate to the composition of NERC's membership Sectors and certain rules relating to the MRC, as well as the bright line criteria for excluding candidates for the role of an independent NERC trustee. Certain revisions address changes to applicable law. Finally, there are a number of revisions that address inconsistent capitalization of defined terms and remove inoperative provisions.

### ***Membership and Member Representatives Committee Composition and Related Matters***

The main substantive revision proposed relates to the membership structure of NERC. The revisions create an associate Sector, to accommodate candidates for membership that do not meet the definition of an existing Sector. The revisions also modify the Sector membership definitions to ensure consistency with the intent of fair and balanced participation in NERC

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<sup>1</sup> Changes have included: (a) providing a 10-day period of time for newly elected trustees to resolve conflicts of interest; (b) modifying the procedure for electing one or more additional Canadian representatives to the Member Representatives Committee (MRC), as necessary, if sufficient Canadian representation does not result from the initial election of MRC members; (c) revising the provision identifying the original members of the Board; (d) eliminating "regional reliability organization" from the Bylaws; (e) amending a reference to "reliability readiness audits"; (f) authorizing the Board to increase the number of trustees from eleven to twelve, and back to eleven, when necessary; and (g) reducing the five-day prior notice requirement for Board meetings held in closed session to a 24-hour prior notice period.

governance by stakeholders with a significant role in the reliability and security of the bulk power system (BPS).<sup>2</sup>

NERC membership is voluntary and open to any person or entity who has an interest in the reliable operations of the BPS. Members are grouped into Sectors based on commonality of characteristics and interests related to reliability. As defined in the Bylaws, a Sector means a group of members that are BPS owners, operators, or users or other persons and entities with substantially similar interests, including governmental entities, as pertinent to the purposes and operations of NERC and the operation of the BPS.

Over the years, it has become clear that not all entities interested in membership fit within Sectors with substantially similar interests. Certain Sectors have seen an increase in membership of persons and entities that do not necessarily have similar interests pertaining to the purposes and operations of NERC and the operation of the BPS. This issue is most prevalent in the small end-use electricity customer Sector, which as currently defined, includes any person who is a consumer of electricity, regardless of whether that person's interests in NERC or in the operation of the BPS are connected to the particular interests of small-end users. Current members of the small end-use electricity customer Sector include universities, consultants providing advice to entities in various other Sectors, and a Reliability Coordinator. Since virtually everyone is a small end-user, the small end-user Sector became a catchall for candidates for membership that do not fit elsewhere, resulting in the loss of the key requirement that members of the Sector have substantially similar interests.

Additionally, the current language of the Bylaws permit persons or entities to join a Sector if they "represent the interests of" entities in the Sector. This broad formulation calls into question whether common interests exist, and may dilute the voice of those entities for which the Sector was created. For example, a consultant that becomes a member while working for entities in the investor-owned utility (IOU), cooperative utility, and state/municipal utility Sectors must choose to be in one of those Sectors. Similarly, a trade association with members in more than one Sector must choose the Sector in which it will participate.

The proposed revisions redefine all Sectors by removing the last sentence in each definition relating to representatives, and replacing it, in most Sectors, but not all, with a more narrow formulation that allows not-for-profit associations that coordinate and help represent the interests of the members of the Sector to be Sector members unless the majority of the Sector members object. Other entities that do not meet a Sector definition but have an interest in the Reliable Operation of the BPS would be eligible to become members in the associate Sector, with the rights and responsibilities discussed below.

The revised definition of the small end-use electricity consumer Sector would include only those entities that exist to protect the interests of small end-use electricity customers as a group, such as consumer advocates and similar organizations, rather than any person or entity that consumes electricity and does not fit within the definition of a large end-user. This change creates consistency between the Sector's intent and representation of small end-users interests at NERC by remediating Sector's current dilution as explained above.

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<sup>2</sup> The proposed revisions do not affect the Segments of the NERC Registered Ballot Body.

The revisions also create an associate Sector, accommodating persons and entities who do not fit within another Sector definition. The associate Sector accommodates the interests of the broader public who may want to participate in NERC matters in a membership capacity while ensuring that the remaining Sectors are comprised of members with a substantial and direct interest in BPS reliability.<sup>3</sup> Associate Sector members have all rights and duties of members of other Sectors, except for the right to nominate and elect Member Representatives Committee representatives. Associate Sector members shall be entitled to receive all public notices issued by the Corporation and may participate on any public meetings of the Corporation or its committees.

At the request of any other Sector, associate Sector members may serve as representatives of such Sector on the Member Representatives Committee and other committees with Sector representation, serve as a proxy for a Sector member, and may coordinate and deliver such Sector's policy input to the Board. They also may serve as at-large members or proxy representatives on committees that include at-large members. No changes are being proposed to the nomination processes for the MRC or other committees. The nomination and selection of associate Sector members to represent Sectors or in at-large capacities, for those committees that have at-large members, would follow existing processes. Additionally, no changes to the rights and responsibilities of MRC members are being proposed, other than with respect to the Regional Entity sector, discussed below. An associate Sector member that is elected as a representative of a Sector will, therefore, have the same rights and responsibilities as any other MRC member.

Given the Regional Entities' unique role in working with NERC to fulfill a common mission, the revisions eliminate the voting representation of the Regional Entities on the MRC, while maintaining their participation as non-voting members. The revisions also clarify the language in the definition of the Government representative Sector as it relates to members of the Sector that are non-voting members of the MRC (rather than of the Sector).

The proposed revisions clarify that the Florida Reliability Coordinating Council would participate in the same Sector as the Independent System Operators (ISO) and Regional Transmission Organizations (RTO), rather than participating in the small-end use Sector.

Finally, as it relates to the timing of filling vacancies on the MRC as a result of the election of the chairman and vice chairman, we propose to introduce some flexibility to account for situations in which that election happens off cycle, for example, if a chairman or vice chairman ceases to serve before the end of his or her term and a replacement is named from other MRC voting members. The current language could be read to preclude immediate action to refill the position that would be vacated as a result.

### ***NERC Board Independence and Committee Composition***

The revisions clarify the criteria for independent NERC trustees, to better align the Bylaws with the requirements in section 215 of the Federal Power Act regarding the ERO's independence from users, owners, and operators of the BPS. They also address a trustee's eligibility to serve on the Board's Nominating Committee if he or she is not seeking reelection. The revisions

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<sup>3</sup> The definition of "Sector" is also being revised to contemplate the associate sector, where members may not have substantially similar interests among themselves.

streamline, without making substantive revisions, the language regarding the Board's ability to increase and decrease the number of independent trustees.

Independent trustees may not be officers, directors, or employees of any entities that are subject to NERC Reliability Standards. While that has been the practice, the current language of the Bylaws describing limitations and exclusions with respect to potential independent trustees refers instead to NERC members rather than to owners, operators, and users of the BPS. The revised Bylaws make the restriction explicit for entities that are owners, operators and users of the BPS and address relationships with other members that would interfere with a trustee's independent judgment in the catchall provision that prohibits any such relationships.

The Bylaws currently provide that a NERC employee or officer may not serve as an independent director, but the independent chairman and vice chairman of the Board elsewhere in the Bylaws are defined as NERC officers. The amendments resolve this inconsistency by eliminating the restriction on service as independent trustees by those NERC officers who are not also NERC employees.

The revisions also clarify that the Nominating Committee may include any trustee who is not standing for reelection, such as those who are term-limited. Similarly, the Nominating Committee can be chaired by any trustee who is not standing for reelection.

### ***Other Revisions***

In addition to these substantive amendments, NERC management proposes to align the Bylaws with New Jersey corporate law regarding actions without a meeting by members, MRC and Board, as well as provisions relating to remote attendance in meetings.

Finally, NERC management proposes additional non-substantive amendments to remove outdated or inoperative provisions and to address capitalization of defined terms.

Additional detail concerning all of the proposed revisions is below.

## **Description of Amendments on Membership, Trustee Independence, Standing Committees and the MRC**

### Article I – Definitions

- *Section 1 – Definitions*

Revises the definition of "Sector" to allow for a sector in which members do not have substantially similar interests. This was required to accommodate the new "associate" Sector that was created to accommodate a broader interest in NERC membership by entities that are not users, owners, and operators of the BPS without causing dilution of other Sectors.

### Article II – Membership

- *Section 1 – Members*

Clarifies that membership in the Corporation requires compliance with the requirements of Section 1, including successfully registering in a Sector or as an associate Sector member.



- *Section 2 – Membership Initiation and Renewal*  
Clarifies the language used to avoid confusion between the initiation of the membership process and “registration” which is the process by which entities become subject to NERC Reliability Standards.
- *Section 4 – Membership Sectors*  
Narrows the definitions of most Sectors to exclude certain representatives, which would become associate Sector members. A similar change is made to Section 4(b).
- *Section 4(a)(ix) – Small End-use Electricity Customer*  
Defines the Sector to include persons or entities that represent the collective interests of customers who meet the specific qualifications in this section. The proposed amendment is necessary to better capture entities such as state consumer advocates or other advocate groups and avoid dilution of that perspective. The revisions also eliminate the possibility of redundant representation of persons or entities in this Sector and in another Sector. Specifically, individuals or entities that provided products or services within the previous 12 months related to BPS reliability to entities eligible to join another Sector are precluded from joining this Sector.
- *Section 4(a)(x) – Independent System Operator/Regional Transmission Organization*  
Amends this Sector definition to include the Florida Reliability Coordinating Council.
- *Section 4(a)(xii) – Government Representatives*  
Clarifies the language in the definition of the Government representative Sector as it relates to members of the Sector that are non-voting members of the MRC (rather than of the Sector).
- *Section 4(a)(xiii) – Associate*  
Defines the associate Sector and its rights and responsibilities.

### Article III – Board of Trustees

- *Sections 1a and 1b – Increase in Number of Trustees; Decrease in Number of Trustees*  
Streamlines the provisions, without altering the substance.
- *Section 2(a) – Composition of Board Based on Country Participation*  
Clarifies that a Canadian Board member must be a citizen and resident of Canada. While that has been the practice, the revised Bylaws would make this requirement explicit.
- *Section 3(a) – Independent Board Members*  
Clarifies that independent trustees may not be officers, directors, or employees of entities that are subject to Reliability Standards. While that has been the practice, and is reflected in NERC’s Governance Guidelines regarding ethics and conflicts of interest, the revised Bylaws would make this requirement explicit. The amendments would also

remove restrictions associated with relationships with NERC members who are not subject to Reliability Standards. This is necessary to align this provision with the requirement in section 215 of the Federal Power Act that the ERO be independent of owners, users, and operators of the BPS. This is also done in recognition of the fact that membership in NERC is broadly diverse and open to the public so the current limitation has the potential to be unduly restrictive. Finally, the revisions would address a potential inconsistency in the Bylaws regarding the treatment of the Board chairman and vice chairman, both of whom are at one time officers of the Corporation pursuant to Article VI, Sections 1(a) and 1(b) and independent trustees.

- *Section 5 – Nominating Committee*

Clarifies that the nominating committee may include any trustee who is not standing for reelection, such as those who are term-limited. Similarly, the Nominating Committee can be chaired by any trustee who is not standing for reelection. An additional clarification is made with respect to the language describing the timing of the expiration of a trustee term, which coincides with the annual election, in the year subsequent to when the Nominating Committee is seated.

#### Article V – Meetings of the Board of Trustees

- *Section 2 – Special Meetings of the Board*

Updates references to various means of providing notice.

#### Article VI – Officers

- *Section 1 – Officers*

Deletes references to “assistant secretary-treasurer” because this officer position is deemed unnecessary.

#### Article VIII – Member Representatives Committee

- *Section 2 – Composition of the Member Representatives Committee*

Proposes to make the representatives from the Regional Entity Sector non-voting members of the committee. Clarifies that an associate Sector member may be nominated by a Sector to represent such Sector. The revisions also reorganize the language describing voting rights of representatives of other Sectors for clarity, without additional substantive modification.

- *Section 3 – Election of the Members of the Member Representatives Committee*

Clarifies that an associate Sector member may be nominated by a Sector to represent such Sector.

- *Section 6 – Vacancies on the Member Representatives Committee*

As it relates to the timing of filling vacancies on the MRC as a result of the election of the chairman and vice chairman, we propose to introduce some flexibility to account for situations in which that election happens off cycle, for example, if a chairman or vice chairman ceases to serve before the end of his or her term and a replacement is named

from other MRC voting members. The current language could be read to preclude immediate action to refill the position that would be vacated as a result.

- *Section 8 – Special Meetings of the Member Representatives Committee*  
Updates references to various means of providing notice.

## **Description of Proposed Amendments for Internal Document Consistency and Alignment with New Jersey Law**

### Article IV – Meeting of Members of the Corporation

- *Section 4 – Action Without Meeting of Members*  
Revises the Bylaws to permit less than unanimous written consent of all members to authorize actions so long as certain procedural steps are taken.
- *Section 5 – Meetings of Members to be Open*  
Addresses revisions to New Jersey corporate law regarding remote meeting participation under certain circumstances.

### Article V – Meetings of the Board of Trustees

- *Section 4 – Meetings of the Board to be Open*  
Clarifies remote participation in meetings.
- *Section 6 – Action without a Meeting*  
Revises the Bylaws to allow for more efficient decision making through actions without a meeting, provided that all trustees consent to such decision in writing.

### Article VIII – Member Representatives Committee

- *Section 12 – Action Without a Meeting of the Member Representatives Committee*  
Clarifies that in the case of the election of trustees by the MRC, the action may be taken without a meeting only if all members of the MRC consent thereto in writing.

## **Proposed Amendments to Remove Inoperative Provisions**

### Article III – Board of Trustees

- *Section 3(b) – Independent Board Members*  
Removes the original list of Board members as well as the notation for including current and future members since this information is publicly available on NERC's website.
- *Section 5 – Nominating Committee*  
Removes outdated language regarding the election of trustees held in February 2007.

## Article VIII – Member Representatives Committee

- *Sections 2, 3, 5, 6, & 13 – Elections of Members of the Member Representatives Committee – Officers of the Member Representatives Committee – Vacancies on the Member Representatives Committee – Other Procedures of the Member Representatives Committee*

Removes outdated language regarding the initial elections.

## Article IX – Reliability Standards

- *Section 1 – Development of Reliability Standards*

Removes the initial November 1, 2006 Bylaws reference and updates this provision to apply the NERC Rules of Procedure (ROP) that are in effect “as of the date of these Bylaws.”

## Article XI – Rules of Procedure

- *Section 2 – Adoption, Amendment, and Repeal of Rules of Procedure*

Removes the initial November 1, 2006 Bylaws reference and update this provision to apply the ROP that are in effect “as of the date of these Bylaws.”

## **Other Proposed Non-Substantive Amendments**

Defined terms were capitalized throughout the document. In addition, a clarifying change was made in Article II, Section 3, to replace “it’s” with “the Corporation’s.” And in Article VIII, Section 6, the terms “chair” and “vice chair” were revised to conform to the usage elsewhere in the document.

All proposed revisions are reflected in the attached redlined Bylaws.

## **Attachment**

1. Proposed NERC Bylaws Amendments (*redline*)

# Amended and Restated **Bylaws**

Approved by the Board of Trustees: ~~February 8,~~  
~~2018~~[Date] Effective: ~~September 25, 2018~~[Date]

**AMENDED AND RESTATED BYLAWS**

**OF THE**

**NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION**

**ARTICLE I**

**Definitions**

**Section 1 — Definitions** — As used in these Bylaws of the North American Electric Reliability Corporation (hereinafter referred to as “the Corporation”), the terms set forth in this Article I shall have the meanings set forth herein.

“~~Applicable Governmental Authority~~Applicable governmental authority” means the Federal Energy Regulatory Commission within the United States and the appropriate governmental authority with subject matter jurisdiction over reliability within Canada and Mexico.

“Board” means the Board of Trustees of the Corporation.

“~~Bulk power system~~Bulk Power System” means facilities and control systems necessary for operating an interconnected electric energy transmission network (or any portion thereof) and electric energy from generation facilities needed to maintain transmission system reliability. The term does not include facilities used in the local distribution of electric energy.

“Commission” means the Federal Energy Regulatory Commission.

“~~Electric reliability organization~~Electric Reliability Organization” or “ERO” means the organization that is certified by the Commission under Section 39.3 of its regulations, the purpose of which is to establish and enforce Reliability Standards for the ~~bulk power system~~Bulk Power System in the United States. The organization may also have received recognition by applicable governmental authorities in Canada and Mexico to establish and enforce ~~reliability standard~~Reliability Standards for the ~~bulk power system~~Bulk Power Systems of the respective countries.

“Member” means a member of the Corporation pursuant to Article II of these Bylaws.

“Net Energy for Load (NEL)” means net generation of an electric system plus energy received from others less energy delivered to others through interchange. It includes system losses, but excludes energy required for storage of energy at energy storage facilities. Calculations of ~~net energy for load~~Net Energy for Load for all purposes under these Bylaws shall be based on the most recent calendar year for which data on ~~net energy~~

~~for load~~Net Energy for Load of applicable regions of the United States, Canada, and Mexico is available.

~~“Regional entity~~Regional Entity” means an entity having enforcement authority pursuant to 18 C.F.R. § 39.8.

~~“Reliability standard~~Reliability Standard” means a requirement to provide for ~~reliable operation~~Reliable Operation of the ~~bulk power system~~Bulk Power System, including without limiting the foregoing requirements for the operation of existing ~~bulk power system~~Bulk Power System facilities, including cybersecurity protection, and the design of planned additions or modifications to such facilities to the extent necessary for ~~reliable operation~~Reliable Operation of the ~~bulk power system~~Bulk Power System, but shall not include any requirement to enlarge ~~bulk power system~~Bulk Power System facilities or to construct new transmission capacity or generation capacity.

~~“Reliable operation~~Reliable Operation” means operating the elements of the ~~bulk power system~~Bulk Power System within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of the ~~bulk power system~~Bulk Power System will not occur as a result of a sudden disturbance, including a cybersecurity incident, or unanticipated failure of system elements.

“Sector” means a group of members of the Corporation that are ~~bulk power system~~Bulk Power System owners, operators, or users or other persons and entities with substantially similar interests, including governmental entities, ~~or other persons or entities that have an interest in the Reliable Operation of the North American Bulk Power System~~, as pertinent to the purposes and operations of the Corporation and the operation of the ~~bulk power system~~Bulk Power System, as defined in Article II, Section 4 of these Bylaws. Each ~~sector~~Sector shall constitute a class of members for purposes of the New Jersey Nonprofit Corporation Act.

**Section 2 — Additional Defined Terms** — Additional terms not defined in this Article I are defined in the remainder of these Bylaws.

**Section 3 — Technical Terms** — Technical terms not defined in these Bylaws shall have the definitions set forth in the Federal Power Act, Part 39 of the regulations of the Commission, or the “Glossary of Terms Used in Reliability Standards”, in that order of precedence, and if not defined in any of those sources, shall be defined in accordance with their commonly understood and used technical meaning in the electric power industry, including applicable codes and standards.

## ARTICLE II Membership

**Section 1 — Members** — Membership in the Corporation is voluntary and is open to any person or entity that has an interest in the ~~reliable operation~~Reliable Operation of the North American ~~bulk power system~~Bulk Power System and that registers with the Corporation in a sSector as a member, maintains its registration in accordance with this Article II, and complies with the other conditions and obligations of membership specified in these Bylaws.

~~Membership in a regional entity~~Regional Entity shall not be a condition for membership in the Corporation. The secretary of the Corporation shall maintain a roster of the members of the Corporation.

**Section 2 — ~~Registration as a Member~~Registration Initiation and Renewal** — Any person or entity that is eligible to be a member of the Corporation in accordance with Article II, Section 1 may become a member by completing, and submitting to the secretary of the Corporation, a membership registration on a form prescribed by the ~~board~~Board. If not a natural person, the member shall designate a

representative and an alternative representative with authority to receive notices, cast votes, and execute waivers and consents on behalf of the member. The secretary of the Corporation shall maintain a current roster of the members of the Corporation including each member's designated representative and alternative representative. From time to time, the ~~board~~Board shall establish a date by which members shall submit their registration renewals. All members shall be required to renew their registrations within thirty (30) calendar days of a request by the secretary of the Corporation, using a registration renewal form prescribed by the ~~board~~Board. The secretary of the Corporation shall remove from the roster of members of the Corporation any member that has not submitted a registration renewal within thirty (30) days following a date established by the ~~board~~Board. The secretary shall notify any member that is removed from the roster of members of such removal, by notice sent to such former member's last known address on the records of the Corporation.

### **Section 3 — Obligations and Conditions of Membership**

- a. Each member shall agree, in writing, to accept the responsibility to promote, support, and comply with the purposes and policies of the Corporation as set forth in ~~its the~~the Corporation's Certificate of Incorporation, Bylaws, Rules of Procedure, and Reliability Standards as from time to time adopted, approved, or amended.



- b. As an additional condition of membership in the Corporation, each person or entity registering as a member shall be required to execute an agreement with the Corporation, in a form to be specified by the ~~board~~Board, that such person or entity will hold all trustees, officers, employees, and agents of the Corporation, as well as volunteers participating in good faith in the activities of the Corporation, harmless, to the extent permitted by Federal or provincial laws, regulations and rules, for any injury or damage to that member caused by any act or omission of any trustee, officer, employee, agent, or volunteer in the course of performance of his or her duties on behalf of the Corporation, other than for acts of gross negligence, intentional misconduct, or a breach of confidentiality.

#### Section 4 — Membership Sectors

- a. Each member that qualifies for membership in one or more Sectors as defined below shall elect to be assigned to one ~~of the following memberships~~such sector~~Sectors~~: (i) investor-owned utility; (ii) state/municipal utility; (iii) cooperative utility; (iv) federal or provincial utility/power marketing administration; (v) transmission-dependent utility; (vi) merchant electricity generator; (vii) electricity marketer; (viii) large end-use electricity customer; (ix) small end-use electricity customer; (x) independent system operator/regional transmission organization; (xi) ~~regional entity~~Regional Entity; ~~or~~ (xii) government representatives; or (xiii) associate. The composition of each ~~sector~~Sector shall be as follows:
- i. Investor-owned utility — This ~~sector~~Sector includes any investor-owned entity with a substantial business interest in ownership and/or operation in any of the asset categories of generation, transmission or distribution. ~~This sector also includes organizations that represent the interests of such entities. A not-for-profit association that coordinates and helps represent the interests of members of the Sector may be a member of the Sector unless the majority of the other members of the Sector objects.~~
- ii. State/municipal utility — This ~~sector~~Sector includes any entity owned by or subject to the governmental authority of a state or municipality, that is engaged in the generation, delivery, and/or sale of electric power to end-use customers primarily within the political boundaries of the state or municipality; and any entity, whose members are municipalities, formed under state law for the purpose of generating, transmitting, or purchasing electricity for sale at wholesale to their members. ~~This sector also includes organizations that represent the interests of such entities. A not-for-profit association that coordinates and helps represent the interests of members of~~

the Sector may be a member of the Sector unless the majority of the other members of the Sector objects.

- iii. Cooperative utility — This ~~sector~~Sector includes any non-governmental entity that is incorporated under the laws of the state in which it operates, is owned by and provides electric service to end-use customers at cost, and is governed by a ~~board~~Board of directors that is elected by the membership of the entity; and any non-governmental entity owned by and which provides generation and/or transmission service to such entities. ~~This sector also includes organizations that represent the interests of such entities.~~ A not-for-profit association that coordinates and helps represent the interests of members of the Sector may be a member of the Sector unless the majority of the other members of the Sector objects.
- iv. Federal or provincial utility/Federal Power Marketing Administration — This ~~sector~~Sector includes any U.S. federal, Canadian provincial, or Mexican entity that owns and/or operates electric facilities in any of the asset categories of generation, transmission, or distribution; or that functions as a power marketer or power marketing administrator. ~~This sector also includes organizations that represent the interests of such entities.~~ A not-for-profit association that coordinates and helps represent the interests of members of the Sector may be a member of the Sector unless the majority of the other members of the Sector objects.
- v. Transmission-dependent utility — This ~~sector~~Sector includes any entity with a regulatory, contractual, or other legal obligation to serve wholesale aggregators or customers or end-use customers and that depends primarily on the transmission systems of third parties to provide this service. ~~This sector also includes organizations that represent the interests of such entities.~~ A not-for-profit association that coordinates and helps represent the interests of members of the Sector may be a member of the Sector unless the majority of the other members of the Sector objects.
- vi. Merchant electricity generator — This ~~sector~~Sector includes any entity that owns or operates an electricity generating facility that is not included in an investor-owned utility's rate base and that does not otherwise fall within any of ~~sector~~Sectors (i) through (v). This ~~sector~~Sector includes but is not limited to cogenerators, small power producers, and all other nonutility electricity producers such as exempt wholesale generators who sell electricity at wholesale. ~~This sector also includes organizations that represent the interests of such entities.~~ A not-for-profit association that coordinates and helps represent the interests of members of the Sector may be a member of the Sector unless the majority of the other members of the Sector objects.

- vii. Electricity marketer — This ~~sector~~Sector includes any entity that is engaged in the activity of buying and selling of wholesale electric power in North America on a physical or financial basis. ~~This sector~~Sector also includes organizations that represent the interests of such entities. A not-for-profit association that coordinates and helps represent the interests of members of the Sector may be a member of the Sector unless the majority of the other members of the Sector objects.
  
- viii. Large end-use electricity customer — This ~~sector~~Sector includes any entity in North America with at least one service delivery taken at 50 kV or higher (radial supply or facilities dedicated to serve customers) that is not purchased for resale; and any single end-use customer with an average aggregated service load (not purchased for resale) of at least 50,000 MWh annually, excluding cogeneration or other back feed to the serving utility. ~~This sector~~Sector also includes organizations that represent the interests of such entities. A not-for-profit association that coordinates and helps represent the interests of members of the Sector may be a member of the Sector unless the majority of the other members of the Sector objects.
  
- ix. Small end-use electricity customer — This Sector includes persons or entities such as associations, state consumer advocates, or other advocacy organizations that represent the collective interests of groups of electricity end users that take service ~~This sector includes any person or entity within North America that takes service~~ below 50 kV or; ~~and any single end-use customer~~ have with an average aggregated service load (not purchased for resale) of less than 50,000 MWh annually, excluding cogeneration or other back feed to the serving utility. ~~This sector also includes organizations (including state consumer advocates) that represent the interests of such entities. A not-for-profit association that coordinates and helps represent the interests of members of the Sector may be a member of the Sector unless the majority of the other members of the Sector objects. Any individual or entity providing products or services within the previous twelve (12) months related to Bulk Power System reliability to an entity eligible to join another Sector cannot join this Sector.~~
  
- x. Independent system operator/regional transmission organization — This ~~sector~~Sector includes any entity authorized by the Commission to function as an independent ~~transmission~~ system operator, a regional transmission organization, or a similar organization; comparable entities in Canada and Mexico; ~~and~~ the Electric Reliability Council of Texas or its successor; and the Florida Reliability Coordinating Council, or its successor. ~~This sector also includes organizations that represent the interests of such entities.~~

xi. ~~Regional entity~~Regional Entity — This ~~sector~~Sector includes any ~~regional entity~~Regional Entity as defined in Article I, Section 1.

xii. Government representatives — This ~~sector~~Sector includes any federal, state, or provincial government department or agency in North America having a regulatory and/or policy interest in wholesale electricity. A not-for-profit association that coordinates and helps represent the interests of members of the Sector may be a member of the Sector unless the majority of the other members of the Sector objects. Entities with regulatory oversight over the Corporation or any ~~regional entity~~Regional Entity, including U.S., Canadian, and Mexican federal agencies and any provincial entity in Canada having statutory oversight over the Corporation or a ~~regional entity~~Regional Entity with respect to the approval and/or enforcement of ~~reliability standard~~Reliability Standards, may be nonvoting members of this ~~sector~~Member Representatives Committee.

~~xii~~xiii. Associate — This Sector includes all members that do not qualify for one of the Sector membership categories set forth in subsections i. through xii. above. Associates shall have all rights and duties of members except for the right to nominate and elect Member Representatives Committee representatives. Associates shall be entitled to receive all public notices issued by the Corporation and may participate in any public meetings of the Corporation or its committees. At the request of any other Sector, an associate may serve as a representative of such Sector on the Member Representatives Committee and other committees with Sector representation, serve as a proxy for a Sector representative, and may coordinate and deliver such Sector's policy input to the Board. Associates also may serve as at-large members or their proxy on committees that include at-large members.

b. A member-candidate for membership may shall elect to be assigned to any ~~sector~~Sector so long as membership in that ~~sector~~Sector is consistent with the ~~member's candidate's~~ business or other activities. A corporation and its affiliates shall be considered a single member and may register in only one ~~sector~~Sector, which may be any single ~~sector~~Sector for which the corporation or any of its affiliates is eligible. ~~A consultant, attorney, agent, vendor, trade or industry association, state, provincial or local consumer advocate organization that provides services to or otherwise represents the interests of the members of one or more sectors may elect to be assigned to one such sector.~~

**Section 5 — Term of Membership** — Membership in the Corporation shall be retained as long as a member meets its respective qualifications, obligations, and conditions of membership as set forth in this Article II.

**Section 6 — Removal** — In addition to termination of membership in accordance with Article II, Section 2, the ~~board~~Board, following notice to the member and exercise of appropriate due process procedures, may terminate the membership of a member if in the judgment of the ~~board~~Board that member has violated its obligations and responsibilities to the Corporation. This termination shall require a two-thirds vote of the trustees present and voting at a meeting of the ~~board~~Board at which a quorum of the ~~board~~Board entitled to vote is present. Within thirty (30) days following the action of the ~~board~~Board terminating the membership of a member, the member shall be entitled to appeal such termination to the Commission or to the ~~applicable governmental authority~~Applicable Governmental Authority in Canada or Mexico.

### **ARTICLE III** **~~Board~~Board of Trustees**

**Section 1 — Board of Trustees** — The business and affairs of the Corporation shall be managed by a Board of Trustees. The ~~board~~Board shall consist of eleven members (the “trustees”), unless it is increased to twelve members pursuant to Section 1a of this Article III. All but one of the trustees shall be “independent” trustees nominated and elected in accordance with the requirements and procedures specified in Sections 2, 3, 4, 5, and 6 of this Article III (the “independent trustees”). The remaining trustee shall be the person elected by the ~~board~~Board, in accordance with Article VI, Section 1, of these Bylaws, to serve as president of the Corporation (the “management trustee”). Each trustee, including the management trustee, shall have one (1) vote on any matter brought before the ~~board~~Board for a vote. All trustees are expected to serve the public interest and to represent the reliability concerns of the entire North American ~~bulk power system~~Bulk Power System.

**Section 1a — Increase in ~~N~~Number of Trustees** — ~~If it deems to be in best interests of the Corporation and its Members, t~~The ~~board~~Board shall have the authority, by resolution, adopted no later than December 1, to increase the number of trustees from eleven to twelve, of which eleven trustees shall be independent trustees, with such increase to be effective as of the date of an annual election of independent trustees pursuant to Section 6 of this Article III. ~~In order for the board to exercise this authority, the resolution increasing the number of trustees from eleven to twelve must be adopted by the board no later than December 1 immediately preceding the date of the annual election of independent trustees at which the increase is to be effective, and shall state a determination by the board that the increase is in the best interests of the Corporation and its Members. If the board adopts a resolution increasing the number of trustees from eleven to twelve, the nominating committee appointed pursuant to Section 5 of this Article III shall nominate a candidate to stand for election to the newly created independent trustee position at the next annual election of independent trustees, along with candidates for the positions of independent trustees whose terms are expiring as of such election.~~—The newly-created independent trustee position shall be filled by election in accordance with Section 6 of this Article

III. ~~Upon election of a trustee to the newly created independent trustee position, the board shall thereafter consist of twelve trustees, of whom eleven shall be independent trustees and one shall be the management trustee provided for in Section 1 of this Article III, unless the~~

~~board decreases the number of trustees in accordance with Section 1b of this Article III.~~

**Section 1b — Decrease in ~~number~~ Number of Trustees** — If the ~~board~~Board has previously increased the number of trustees under Section 1a of this Section III, and if it deems to be in the best interests of the Corporation and its Members, the ~~board~~Board shall have the authority, by resolution, adopted by September 1, to decrease the number of trustees from twelve to eleven, of which ten trustees shall be independent trustees, with such decrease to be effective as of the date of an annual election of independent trustees pursuant to Section 6 of this Article III. The decrease in number of trustees shall be effected by eliminating one of the independent trustee positions whose term is expiring as of the date of such annual election of trustees, in which case no election shall be held to replace such trustee. ~~In order for the board to exercise this authority, the resolution decreasing the number of trustees from twelve to eleven must be adopted by the board no later than September 1 immediately preceding the date of the annual election of independent trustees at which the decrease is to be effective; shall identify the independent trustee position expiring at the date of such annual election that shall be eliminated; and shall state a determination by the board that the decrease is in the best interests of the Corporation and its Members.~~

## **Section 2 — Composition of Board Based on Country Participation**

- a. The ~~board~~Board shall consist of a number of trustees from the United States and from Canada. A trustee from Canada shall be a citizen and resident of Canada. The number of trustees from Canada shall not be less than the percentage of the NEL of Canada to the total NEL of the United States and Canada, times eleven (or times twelve if the number of trustees has been increased to twelve pursuant to Section 1a of this Article III), rounded up to the nearest whole number. For purposes of this ~~board~~Board composition requirement, the management trustee shall be counted as a trustee from Canada if he or she is a Canadian citizen and resident.
- b. When the Corporation receives recognition by appropriate regulatory authorities in Mexico as its ~~electric reliability organization~~Electric Reliability Organization, the number of independent trustees will be increased by at least one, and the ~~board~~Board composition requirement in subsection (a) will be expanded to include Mexico.

**Section 3 — Independent Board Members** — The independent trustees shall be elected, shall have the qualifications specified, and shall serve in the manner provided in this section.

- a. An independent trustee is a person ~~(i)~~ who is not (i) an ~~officer or~~ employee of the

Corporation, ~~(ii) a member, user, owner, or operator of the Bulk Power System subject to Reliability Standards,~~ or an officer, director, or employee of ~~a member of the Corporation, such an entity,~~ ~~or~~ ~~(iii)~~ an officer, director, or employee of any entity that would reasonably be perceived as having a direct financial interest in the outcome of ~~board~~Board decisions; and ~~is (ii)-a person~~ who does not have any other relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a trustee. Provided, that upon initial election to the ~~board~~Board, an independent trustee shall within ten (10) days terminate any employee, officer, or director position that conflicts with this subparagraph and shall within sixty (60) days terminate any financial interest or other relationship that conflicts with this subparagraph, and prior to such termination shall not participate in discussion of or voting on any matter involving the entity of which the trustee is an employee, officer or director or in which the trustee has the

financial interest or other relationship giving rise to the conflict.

Independent trustees shall be elected to terms expiring at the annual election of independent trustees occurring in the third year after their election. ~~As of the original effective date of these Bylaws, the independent trustees of the Corporation and the date the term of each independent trustee expires were as follows:~~

<u>Name</u>	<u>Term Expires</u>
<del>John Q. Anderson</del>	<del>2007</del>
<del>Paul F. Barber</del>	<del>2008</del>
<del>Thomas W. Berry</del>	<del>2007</del>
<del>Richard Drouin</del>	<del>2009</del>
<del>James M. Goodrich</del>	<del>2008</del>
<del>Donald P. Hodel</del>	<del>2008</del>
<del>Sharon L. Nelson</del>	<del>2007</del>
<del>Bruce A. Scherr</del>	<del>2009</del>
<del>Kenneth G. Peterson</del>	<del>2009</del>
<del>Fred Gorbet</del>	<del>2008</del>

- b. Independent trustees shall be nominated and elected pursuant to the nomination and election procedures specified in Sections 4, 5, and 6 of this Article III.

**Section 4 — Vacancies on the Board** —Should any vacancy on the ~~board~~Board arise from the death, resignation, retirement, disqualification, or removal from office of any independent trustee, or from any other cause, such vacancy shall be filled by electing a trustee at the next annual election of trustees to fill the remainder, if any, of the term of the departed trustee. Provided, that the ~~board~~Board by resolution may in its discretion call a special election to fill

any such vacancy for the remainder, if any, of the term of the departed trustee. Any vacancy shall be filled so as to maintain the composition of the ~~board~~Board in accordance with country participation pursuant to Section 2 of this Article III.

**Section 5 — Nominating Committee** — The ~~board~~Board shall appoint, on an annual basis, or more frequently if needed in the event of a special election pursuant to Article III, Section 4, a nominating committee (the “nominating committee”) to recommend candidates (i) to succeed the independent trustees whose terms expire ~~during the current year~~at the next annual election and (ii) to serve the remainder of the term of any independent trustee who ceased to serve as a trustee subsequent to the last annual election of trustees. The nominating committee shall consist of ~~those~~ independent trustees ~~whose terms do not expire~~who are not standing for reelection during the current year at the next annual election and such number of other persons with such qualifications as the ~~board~~Board shall specify, provided, that the nominating committee shall be chaired by an independent trustee ~~whose term does not expire~~is not standing for reelection during the current year and shall include at least three persons who are also members of the Member Representatives Committee, ~~and provided further, that the nominating committee formed for the purpose of recommending candidates to stand for election as trustees at the election to be held on or about February 1, 2007, pursuant to Article III, Section 6 shall not include any members of the Member Representatives Committee but shall include three~~

~~persons each of whom at the time of his or her appointment by the chair of the Stakeholders Committee of the North American Electric Reliability Council to the nominating committee shall be a member of that Stakeholders Committee.~~ The ~~board~~Board shall establish, by resolution, the procedures to be followed by the nominating committee in identifying and recommending candidates to serve as independent trustees; provided, however, that such procedures shall include a means of permitting members of the Corporation to recommend to the nominating committee candidates for consideration as nominees for independent trustees. The nominating committee shall nominate candidates for election to the ~~board~~Board consistent with the requirements of Article III, Section 2 for ~~board~~Board composition by country participation, and shall also endeavor to nominate candidates for election to the board consistent with the objectives that the board as an entirety reflects expertise in the areas of technical electric operations and reliability, legal, market, financial, and regulatory matters, and familiarity with regional system operation issues; and reflects geographic diversity.

**Section 6 — Election of Independent Trustees** — The Member Representatives Committee of the Corporation shall elect the persons (i) to succeed those independent trustees whose terms expire each year and (ii) to serve the remainder of the term of any independent trustee who ceased to serve as a trustee subsequent to the last annual election of independent trustees. The annual election of independent trustees shall be scheduled to be conducted on or about February 1 of each year or as soon thereafter as is reasonably possible. Any special election pursuant to Article III, Section 2 shall be held as expeditiously as possible consistent with the time required for a nominating committee to be appointed and to nominate one or more candidates for the special election. All independent trustees shall be elected from nominees



proposed by the nominating committee. A nominee shall be elected an independent trustee if such person receives the affirmative vote of two-thirds of the members of the Member Representatives Committee. Each nominee receiving the necessary two-thirds vote of the Member Representatives Committee shall take office immediately upon election. In the event that the voting fails to elect a nominee to fill any of the positions of independent trustee to be filled in an annual election of independent trustees, the nominating committee shall as promptly as reasonably possible consider and propose one or more additional nominee or nominees for that position, and a vote by the Member Representatives Committee on the election of such nominee or nominees shall be conducted as quickly as possible. For avoidance of doubt, the independent trustees shall be elected by the Member Representatives Committee in accordance with this Section 6 and shall not be elected by vote of the members of the Corporation.

**Section 7 — Management Trustee** — The president of the Corporation shall be, ex officio, the management trustee of the Corporation, effective as of the date of his or her election by the ~~board~~Board as president of the Corporation in accordance with Article VI, Section 1, of these Bylaws, to serve until such time that he or she ceases to hold the position of president.

**Section 8 — Committees of the Board** — The ~~board~~Board shall by resolution create and appoint all committees of the ~~board~~Board as the ~~board~~Board deems necessary to perform its responsibilities; provided, that the management trustee shall not be a member of the audit committee or of the human resources committee, if any. All committees of the ~~board~~Board shall have such duties as are prescribed by the ~~board~~Board. Notice to the public of the dates, places, and times of meetings of

~~board~~Board committees, and all nonconfidential material provided to committee members, shall be posted on the Corporation's Web site within 24 hours of the time that notice is given to committee members. Meetings of ~~board~~Board committees shall be open to the public, subject to reasonable limitations due to the availability and size of meeting facilities; provided, that the meeting may be held in or adjourn to closed session to discuss matters of a confidential nature, including but not limited to personnel matters, compliance and enforcement matters, litigation, or commercially sensitive or critical infrastructure information of any entity.

## **ARTICLE IV**

### **Meetings of Members of the Corporation**

**Section 1 — Meetings of Members** — Meetings of members of the Corporation may be called for any purpose or purposes by the chairman of the ~~board~~Board or by a number of members constituting at least ten (10) percent of the members on the roster of members maintained by the secretary of the Corporation, which number shall include members in at least three of the ~~sector~~Sectors. Meetings of members shall be held at the principal office of the Corporation or at such other place fixed by the ~~board~~Board as shall be specified in the notice of meeting. Meetings shall be called upon written notice of the time, date, place, and purposes of the meeting given to all members on the roster of members maintained by the secretary of the Corporation not less than ten (10) nor more than sixty days (60) prior to the date of the meeting.

**Section 2 — Quorum and Voting Requirements for Meetings of Members** — At any meeting of the members of the Corporation, attendance in person or by proxy by one-half of the members in each of at least two-thirds of the ~~sectors~~Sectors on the roster of members maintained by the secretary of the Corporation shall constitute a quorum. Except as otherwise expressly provided in the Corporation's Certificate of Incorporation, these Bylaws or applicable law, actions by the members of the Corporation shall be approved upon receipt of seven affirmative votes at a meeting of the members of the Corporation at which a quorum is present, where (i) each ~~sector~~Sector of the Corporation shall have one vote, except that if less than one-half of the members in a ~~sector~~Sector are present, in person or by proxy, at the meeting, the vote of that ~~sector~~Sector shall be weighted by a percentage equal to the number of members of the ~~sector~~Sector present in person or by proxy at the meeting divided by one-half of the members in the ~~sector~~Sector; (ii) the vote of each ~~sector~~Sector of the Corporation shall be allocated for and against the proposed action based on the respective percentages of votes cast for and against the proposed action by the members in that ~~sector~~Sector voting in person or by proxy; and (iii) the proportions of the votes of each ~~sector~~Sector allocated for and against the proposed action shall be summed to determine the total number of votes for and against the proposed action.

**Section 3 — Waivers of Notice of Meetings of Members; and Member Meeting**

**Adjournments** — Notice of a meeting of members need not be given to any member who signs a waiver of notice, in person or by proxy, whether before or after the meeting. The attendance of any member at a meeting, in person or by proxy, without protesting prior to the conclusion of the meeting the lack of notice of such meeting, shall constitute a waiver of notice of the meeting by such member. When any meeting of members is adjourned to another time or place, it shall not be necessary to give notice of the adjourned meeting if the time and place to which the meeting is adjourned are announced at the meeting at which the adjournment is taken, and if at the adjourned meeting only such business is transacted as might have been transacted at the original meeting.

**Section 4 — Action Without a Meeting of Members** — Unless otherwise expressly provided in the Certificate of Incorporation, Any any action, required or permitted to be taken at a meeting of members, may be taken without a meeting upon if the written action is consented to in writing of members who would have been entitled to cast by the minimum number of members that votes which would be required to approve necessary to authorize the action at a meeting of the members at which all members were present and voting. In the case of any corporate action taken without a meeting by less than unanimous written consent of the members; (i) advance written notice shall be given to those members who have not consented in writing (including by posting on the Corporation's Web site or other electronic transmission as permitted by law) setting forth the proposed action consented to; (ii) the proposed action shall not be consummated before the expiration of 10 days after the giving of the notice and 20 days from the giving of the notice in the case of any action taken pursuant to Chapter 10 of the New Jersey Nonprofit Corporation Act (merger, consolidation and sale of assets); and (iii) the notice shall set forth the existence of the 10-day or 20-day period, as applicable. All written responses of the members to the notice referenced herein shall be filed with the minutes of

~~proceedings of members.~~ The call for action without a meeting of members may be initiated by the chairman of the ~~board~~**Board** or by a number of members constituting at least ten (10) percent of the members on the roster of members maintained by the secretary of the Corporation, which number shall include members in at least three of the ~~sector~~**Sectors**. ~~Notice of the proposal for action without a meeting shall be provided to all members on the roster of members maintained by the secretary of the Corporation at least ten (10) days prior to the date established for the tabulation of consents.~~  
~~The members shall receive written notice of the results, and the results shall be posted on the Corporation's Web site, within ten (10) days of the action vote, and all written responses of the members shall be filed with the minutes of proceedings of members.~~

**Section 5 — Meetings of the Members to be Open** — Notice to the public of the dates, places, and times of meetings of the members, and all nonconfidential material provided to the members, shall be posted on the Corporation's Web site within 24 hours of the time that notice is given to the members. Meetings of the members shall be open to the public, subject to reasonable limitations due to the availability and size of meeting facilities; provided, that the meeting may be held in or adjourn to closed session to discuss matters of a confidential nature, including but not limited to personnel matters, compliance and enforcement matters, litigation, or commercially sensitive or critical infrastructure information of any entity. One or more members of, and any other participants in, a meeting of the members may participate in a meeting of the members by means of remote communication to the extent the Board authorizes and adopts guidelines and procedures governing such a meeting. During a state of emergency declared by the Governor of New Jersey, a meeting of members may be held solely by means remote communication. A member participating in a meeting of members by means of remote communication shall be deemed present in person and shall be entitled to vote at the meeting regardless of whether that meeting is held at a designated place or solely by means of remote communication. In any meeting of the members conducted in part or solely by means of remote communication, the secretary, or the secretary's designee, shall:

- a. verify that each person participating remotely is a member or a proxy of a member;
- b. provide each member participating remotely with a reasonable opportunity to participate in the meeting, including an opportunity to vote on matters submitted to the members, and to read or hear the proceedings of the meeting substantially concurrently with those proceedings; and
- c. record and maintain a record of any votes or other actions taken by remote communication at the meeting.

If the Board has authorized participation by members by means of remote communication, then the notice of such meeting shall describe the means of remote communication to be used.

## ARTICLE V Meetings of the Board of Trustees

**Section 1 — Regular Meetings of the Board** — A regular meeting of the ~~board~~Board for such business as may come before the meeting shall be held on or about February 1 of each year. By resolution adopted at any meeting of the ~~board~~Board, the ~~board~~Board may provide for additional regular meetings that may be held without further notice to the trustees.

**Section 2 — Special Meetings of the Board** — Special meetings of the ~~board~~Board for any purpose or purposes may be called at any time by the chairman or by any two trustees. Such meetings may be held upon notice given to all trustees not less than five (5) days prior to the date of the meeting unless the meeting is a closed session as permitted by Article V, Section 4 of these Bylaws, in which event the notice shall be provided to all trustees not less than 24 hours prior to the date and time of the meeting. Such notice shall specify the time, date, place, and purpose or purposes of the meeting and may be given by telephone, ~~telegraph~~facsimile, e-mail, or other electronic me~~ans~~dia, or by express delivery.

**Section 3 — Quorum and Voting Requirements for Meetings of the ~~Board~~Board** — Unless otherwise expressly provided in the Corporation's Certificate of Incorporation, these Bylaws or applicable law, (i) the quorum necessary for the transaction of business at meetings of the ~~board~~Board shall be a majority of the trustees, and (ii) actions by the ~~board~~Board shall be approved upon

receipt of the affirmative vote of a majority of the trustees present and voting at a meeting at which a quorum is present.

**Section 4 — Meetings of the Board to be Open** — Notice to the public of the dates, places, and times of meetings of the ~~board~~Board, and all nonconfidential material provided to the ~~board~~Board, shall be posted on the Corporation's Web site, and notice of meetings of the ~~board~~Board shall be sent electronically to members of the Corporation, within 24 hours of the time that notice or such material is given to the trustees. Meetings of the ~~board~~Board shall be open to the public, subject to reasonable limitations due to the availability and size of meeting facilities; provided, that the ~~board~~Board may meet in or adjourn to closed session to discuss matters of a confidential nature, including but not limited to personnel matters, compliance and enforcement matters, litigation, or commercially sensitive or critical infrastructure information of any entity. Any or all of the trustees, or members of a committee, may participate in a meeting of the ~~board~~Board, or a meeting of a committee, by means of a remote communications system by which all persons participating in the meeting are able to hear each other. Any trustee or members of a committee participating in a meeting of the Board, or a meeting of a committee by means of remote communication shall be deemed present in person and shall be entitled to vote at the meeting regardless of whether that meeting is held at a designated place or solely by means of remote communication.

**Section 5 — Waivers of Notice of Board Meetings; and Board Meeting Adjournments —**

Notice of a ~~board~~Board meeting need not be given to any trustee who signs a waiver of notice, in person or by proxy, whether before or after the meeting, or who attends the meeting without protesting, prior to the conclusion of the meeting, the lack of notice of such meeting. Notice of an adjourned ~~board~~Board meeting need not be given if the time and place to which the meeting is adjourned are announced at the meeting at which the adjournment is taken and if the period of adjournment does not exceed ten (10) days.

**Section 6 — Action Without a Meeting — Unless otherwise expressly provided in the**

**Certificate of Incorporation, Any-any** action, required or permitted to be taken at a meeting of the ~~board~~Board or of any committee thereof, may be taken by the ~~board~~Board or by the committee without a meeting if the action is consented to in writing by ~~the number of all~~ trustees or members of the committee, as the case may be, ~~entitled to vote on the action that would be required to approve the action at a meeting of the board or committee with all members of the board or committee present.~~ The call for action without a meeting of the ~~board~~Board may be initiated by the chairman or by any two trustees. Notice of the proposed call for action without a meeting, and all nonconfidential material provided to the ~~board~~Board in connection with the call for action without a meeting, shall be posted on the Corporation's Web site within 24 hours of the time notice of the call for action without a meeting or such material is provided to the ~~board~~Board. The call for action without a meeting of a committee of the ~~board~~Board may be initiated by the chairman or by any two members of the committee. The trustees or members of the committee shall receive written notice of the results, and unless the action was confidential the results shall be posted on the Corporation's Web site, within seven (7) days of the action vote. All written responses of the trustees shall be filed with the minutes of the Corporation, and all written responses of members of a committee shall be filed with the minutes of such committee.

**ARTICLE VI  
Officers**

**Section 1 — Officers —** At its regular meeting held on or about February 1 of each year in accordance with Section 1 of Article V of these Bylaws, the ~~board~~Board shall elect a chairman, a vice chairman, a president, a secretary, a treasurer, ~~an assistant secretary-treasurer,~~ and such other officers of the Corporation (collectively, the "officers") as it shall deem necessary. The chairman and the vice chairman must each be independent trustees prior to their election to such offices. The chairman, vice chairman, and president shall each be nominated and elected by the ~~board~~Board. All of the remaining officers shall be appointed or removed by the ~~board~~Board based upon the recommendation of the president. The duties and authority of the chairman, the vice chairman, and the president shall be determined from time to time by the ~~board~~Board, and the duties and authority of the other officers of the Corporation shall be determined from time to time by the president. Subject to any such determination, the officers shall have the following duties and authority:

- a. The chairman shall preside at all meetings of the members and at all meetings of the ~~board~~Board. The chairman, in consultation with the other trustees, shall be

responsible for the efficient operation of the ~~board~~Board and its committees. The chairman shall be an ex officio member of each committee of the ~~board~~Board. The chairman may delegate from time to time any or all of the aforesaid duties and authority to the vice chairman, another trustee, the president, or any other officer.

- b. The vice chairman shall have such duties and possess such other powers as may be delegated to him or her by the chairman. The vice chairman shall act as the chairman at such times as the chairman may request. In the event the chairman is unable to discharge the duties and powers of that office by reason of incapacity and during any vacancies in the office of the chairman, the vice chairman shall act as chairman until the cessation of such incapacity or the filling of such vacancy.
- c. The president shall be the chief executive officer of the Corporation. He or she shall be responsible for the day-to-day ongoing activities of the Corporation and shall have such other duties as may be delegated or assigned to him or her by the chairman. The president may enter into and execute in the name of the Corporation contracts or other instruments not in the regular course of business that are authorized, either generally or specifically, by the ~~board~~Board.
- d. The secretary shall maintain the roster of members of the Corporation; shall cause notices of all meetings to be served as prescribed in these Bylaws; shall keep or cause to be kept the minutes of all meetings of the members and the ~~board~~Board; and shall have charge of the seal of the Corporation. The secretary shall perform such other duties and possess such other powers as are incident to his or her office or as shall be assigned to him or her by the president.
- e. The treasurer shall have custody of the funds and securities of the Corporation, and shall keep or cause to be kept regular books of account for the Corporation. The treasurer shall perform such other duties and possess such other powers as are incident to his or her office or as shall be assigned to him or her by the president.

~~f. The assistant secretary treasurer shall have such duties and possess such other powers as may be delegated to him or her by the president.~~

## ARTICLE VII Committees of the Corporation

**Section 1 — Committees of the Corporation** — In addition to those committees specified by these Bylaws, to which the ~~board~~Board shall appoint members in accordance with the requirements of these Bylaws, the ~~board~~Board may by resolution create standing committees of the Corporation; and may in addition by resolution appoint such other committees as the

~~board~~Board deems necessary to carry out the purposes of the Corporation. The ~~board~~Board shall appoint standing committees and other committees of the Corporation that are representative of members, other interested parties and the public, that provide for balanced decision making, and that include persons with outstanding technical knowledge and experience. All appointments of committees of the Corporation shall provide the opportunity for an equitable number of members from the United States and Canada (and from Mexico after the Corporation receives recognition by appropriate governmental authorities in Mexico as its ~~electric reliability organization~~Electric Reliability Organization) to be appointed to each committee in approximate proportion to each country's percentage of the total NEL. All committees shall have such scope and duties, not inconsistent with law, as are specified in these Bylaws and the Rules of Procedure of the Corporation or otherwise determined by the ~~board~~Board.

## ARTICLE VIII Member Representatives Committee

**Section 1 — Member Representatives Committee** — The Corporation shall have a Member Representatives Committee that shall have the following rights and obligations:

- a. to elect the independent trustees, in accordance with Article III, Section 6;
- b. to vote on amendments to the Bylaws, in accordance with Article XIV; and
- c. to provide advice and recommendations to the ~~board~~Board with respect to the development of annual budgets, business plans and funding mechanisms, and other matters pertinent to the purpose and operations of the Corporation.

Because it is elected by the members of the Corporation and not appointed by the ~~board~~Board, the Member Representatives Committee shall not be a standing committee of the Corporation, but is authorized to provide its advice and recommendations directly to the ~~board~~Board.

**Section 2 — Composition of the Member Representatives Committee** — The Member Representatives Committee shall consist of the following voting members:

- (i) ~~(i)~~ two representatives from each of the following sectors: investor-owned utility, state/municipal utility, cooperative utility, federal or provincial utility/Federal Power Marketing Administration, transmission-dependent utility, merchant electricity generator, electricity marketer, large end-use electricity consumer, small end-use electricity consumer, and independent system operator/regional transmission organization;
- (ii) ~~except the government representative sector and the regional entity sector, (ii) two voting representatives from the regional entity sector, with the remaining members of that sector being non-voting members of the Member Representatives Committee, (iii)~~ the chairman and vice chairman of the Member Representatives Committee.;

~~(i) — (iv)~~ any additional Canadian representatives as are

~~(ii) —~~

(iii) selected pursuant to Section 4 of this Article VIII, and; and

(iv) two representatives of state governments.

And the following non-voting members:

~~(v) (v) the following representatives of the government representatives sector: two representatives of the United States federal government, one representative of the Canadian federal government, two representatives of state governments, and one representative of a Canadian provincial government; all of whom shall be nonvoting members of the Member Representatives Committee except the two representatives of state governments~~

(vi) all the members of the Regional Entity Sector.

The representatives of each ~~sector~~Sector shall be members of the Corporation, or officers or ~~ee~~ executive-level employees, agents or representatives of members of the Corporation, in that ~~sector~~Sector; provided, that at any time only one officer, employee, agent, or representative of a member in a ~~sector~~Sector may be a representative from that ~~sector~~Sector. An associate shall not have representation on the Membership Representatives Committee but may be selected by the members of another Sector to represent such Sector. No member of the ~~board~~Board shall be a member of the Member Representatives Committee. The ~~board~~Board may by resolution create additional nonvoting positions on the Member Representatives Committee at the written request of any group of members of the Corporation that believes its interests are not adequately represented on the Member Representatives Committee.

~~In order to provide that the terms of approximately one half of the members of the Member Representatives Committee expire each year, on the initial Member Representatives Committee one half of the representatives from each sector shall serve a term expiring at the next annual meeting, and one half of the representatives from each sector shall serve a term expiring at the second succeeding annual meeting, in each case held pursuant to Section 7 of this Article VIII.~~

~~Following the expiration of the terms of the members of the initial Member Representatives Committee as provided above, e~~Each member of the Member Representatives Committee shall ~~thereafter~~ serve a term of two years commencing at an annual meeting held pursuant to Section 7 of this Article VIII and ending at the second succeeding annual meeting. There shall be no limit on the number of terms that a member of the Corporation, or an employee, agent, or representative of a member of the Corporation, may serve on the Member Representatives Committee.

### **Section 3 — Election of Members of the Member Representatives Committee**



- a. Unless a ~~seetor~~Sector adopts an alternative election procedure, the annual election of representatives from each ~~seetor~~Sector to the Member Representatives Committee, and any election to fill a vacancy, shall be conducted in accordance with the following process, which shall be administered by the officers of the Corporation. During the period beginning approximately ninety (90) days and ending approximately thirty (30) days prior to an annual election, or beginning approximately forty-five (45) days and ending approximately fifteen (15) days prior to an election to fill a vacancy, nominations may be submitted for candidates for election to the Member Representatives Committee, ~~provided that for the initial election the period may begin as soon as these bylaws are made effective and may end approximately fifteen (15) days prior to the election.~~ A nominee for election as a ~~seetor~~Sector representative must be a member, or an officer, executive-level employee or agent of a member, in that ~~seetor~~Sector or an associate nominated by another Sector to represent such Sector. No more than one nominee who is an officer, executive-level employee or agent of a member or its affiliates may stand for election in any single ~~seetor~~Sector; if more than one officer, employee or agent of a member or its affiliates is nominated

for election from a ~~seetor~~Sector, the member shall designate which such nominee shall stand for election. The election of representatives shall be conducted over a period of ten (10) days using an electronic process. Each member in a ~~seetor~~Sector shall have one vote for each representative to be elected from the ~~seetor~~Sector in that election, and may cast no more than one vote for any nominee. The nominee receiving the highest number of votes in each ~~seetor~~Sector shall be elected to the representative position to be filled from that ~~seetor~~Sector; if there is more than one representative position to be filled from a ~~seetor~~Sector, the nominee receiving the second highest number of votes shall also be elected, and so forth. Provided, that to be elected a nominee must receive a number of votes equal to a simple majority of the members in the ~~seetor~~Sector casting votes in the election. If no nominee in a ~~seetor~~Sector receives a simple majority of votes cast in the first ballot, a second ballot shall be conducted which shall be limited to the number of candidates receiving the two (2) highest vote totals on the first ballot (or to the number of candidates receiving the four (4) highest vote totals on the first ballot if two representative positions remain to be filled, and so forth). The nominee or nominees receiving the highest total or totals of votes on the second ballot shall be elected to the representative position or positions remaining to be filled for the ~~seetor~~Sector.

A ~~seetor~~Sector may adopt an alternative procedure to the foregoing to nominate and elect its representatives to the Member Representatives Committee if (i) the alternative procedure is consistent in principle with the procedures specified in the preceding paragraph of this Section 3a, and (ii) the alternative procedure is approved by vote

of at least two-thirds of the members in the ~~sector~~Sector. Any alternative procedure is subject to review and disapproval by the ~~board~~Board.

#### **Section 4 — Adequate Representation of Canadian Interests on the Member**

**Representatives Committee** — In addition to the requirements for composition of the Member Representatives Committee specified in Section 1 of this Article VIII, the Member Representatives Committee shall contain a number of Canadian voting representatives equal to the percentage of the NEL of Canada to the total NEL of the United States and Canada, times the total number of voting members on the Member Representatives Committee, rounded up to the next whole number. If the annual selection of members of the Member Representatives Committee pursuant to Section 3 of this Article VIII does not result in the number of Canadian voting representatives provided for herein on the Member

Representatives Committee, then the candidate who received the highest fraction of the ~~sector~~Sector vote among those candidates who would have qualified as Canadian voting representatives but were not elected to the Member Representatives Committee shall be added to the Member Representatives Committee. Additional Canadian voting representatives shall be added to the

Member Representatives Committee through this selection process until the Member Representatives Committee includes a number of Canadian voting representatives equal to the percentage of the NEL of Canada to the total NEL of the United States and Canada, times the total number of voting members on the Member Representatives Committee, rounded up to the next whole number. Provided, that no more than one such additional Canadian voting representative shall be selected from a ~~sector~~Sector, except that if this limitation precludes the addition of the number of additional Canadian voting representatives required by the previous

sentence, then no more than two Canadian voting representatives may be selected from the same ~~sector~~Sector. Such additional Canadian voting representatives shall be representatives of the ~~sector~~Sectors in which they stood for election, and shall serve terms expiring at the next annual meeting of the Member Representatives Committee pursuant to Section 7 of this Article VIII. For purposes of this Section 4, “Canadian” means one of the following: (a) a company or association incorporated or organized under the laws of Canada or of a province of Canada that is a member of the Corporation, or its designated representative irrespective of nationality; (b) an agency of a federal, provincial, or local government in Canada that is a member of the Corporation, or its designated representative irrespective of nationality; or (c) a person who is a Canadian citizen residing in Canada and is a member of the Corporation.

When the Corporation receives recognition from appropriate governmental authorities in Mexico as the ~~electric reliability organization~~Electric Reliability Organization, this provision will be expanded to provide for adequate representation of Mexican interests on the Member Representatives Committee.

**Section 5 — Officers of the Member Representatives Committee** — ~~At the initial meeting of the Member Representatives Committee, and annually thereafter p~~Prior to the annual election of representatives to the Member Representatives Committee, the Member Representatives Committee shall select a chairman and vice chairman from among its voting members by majority vote of the members of the Member Representatives Committee to serve as chairman and vice chairman of the Member Representatives Committee during the upcoming year; provided, that the incumbent chairman and vice chairman shall not vote or otherwise participate in the selection of the incoming chairman and vice-chairman. The newly selected chairman and vice chairman shall not have been representatives of the same ~~sector~~Sector.

Selection of the chairman and vice chairman shall not be subject to approval of the ~~board~~Board. The chairman and vice chairman, upon assuming such positions, shall cease to act as representatives of the ~~sector~~Sectors that elected them as representatives to the Member Representatives Committee and shall thereafter be responsible for acting in the best interests of the members as a whole.

**Section 6 — Vacancies on the Member Representatives Committee** — In the event that any member of the Member Representatives Committee ceases to serve as a member of the Member Representatives Committee as a result of his or her death, resignation, retirement, disqualification, or removal or other cause, the members in the ~~sector~~Sector of which such member was a representative shall elect, as soon thereafter as reasonably possible, and in accordance with the procedures in Sections 3 and 4 of this Article VIII, a new member to replace the member of the Member Representatives Committee who ceases to serve. ~~Except with regard to the selection of the chairman and vice chairman at the initial meeting of the Member Representatives Committee, t~~The vacancies in the ~~sector~~Sector representatives created by the selection of the chairman and vice chairman pursuant to Section 5 of this Article VIII ~~shall~~may be filled at the annual election of representatives to the Member Representatives Committee that is next held following the election of the chairman and vice chairman. ~~In the case of the selection of the chairman and vice chairman at the initial meeting of the Member Representatives Committee, the sector representative vacancies created thereby shall be filled as soon thereafter as reasonably possible in accordance with the procedures in Section 3 of this Article VIII for sector representative vacancies.~~

**Section 7 — Annual Meeting of the Member Representatives Committee** — An annual meeting of the Member Representatives Committee for the election of independent trustees and to conduct such other business as may come before the meeting shall be held on or about February 1 of each year or as soon thereafter as is reasonably possible. By resolution adopted at any meeting of the Member Representatives Committee, the Member Representatives Committee may provide for additional regular meetings that may be held without further notice to the members of the Member Representatives Committee.

**Section 8 — Special Meetings of the Member Representatives Committee** — Special meetings of the Member Representatives Committee for any purpose or purposes may be called

by the chair of the Member Representatives Committee or by any five (5) members of the Member Representatives Committee, which number shall include representatives from at least three ~~sector~~Sectors, and require notice given to all members of the Member Representatives Committee not less than seven (7) days prior to the date of the meeting. Such notice shall specify the time, date, place, and purpose or purposes of the meeting and may be given by telephone, ~~telegraph~~facsimile, e-mail, or other electronic ~~media~~means, or by express delivery.

**Section 9 — Quorums and Voting for Meetings of the Member Representatives**

**Committee** — The quorum necessary for the transaction of business at meetings of the Member Representatives Committee shall be two-thirds of the voting members of the Member Representatives Committee attending the meeting in person or by proxy. A member of the Member Representatives Committee may give a proxy only to a person who is a member, or an officer, executive-level employee, agent or representative of a member, registered in the same ~~sector~~Sector or an associate. Each voting member of the Member Representatives Committee shall have one (1) vote on any matter coming before the Member Representatives

Committee that requires a vote. Except as otherwise expressly provided in the Corporation's Certificate of Incorporation, these Bylaws or applicable law, actions by members of the Member Representatives Committee shall be approved upon receipt of the affirmative vote of a majority of the voting members of the Member Representatives Committee present and voting, in person or by proxy, at any meeting at which a quorum is present.

**Section 10 — Meetings of the Member Representatives Committee to be Open** — Notice to the public of the dates, places, and times of meetings of the Member Representatives Committee, and all nonconfidential material provided to the Member Representatives Committee, shall be posted on the Corporation's Web site, and notice of meetings of the Member Representatives Committee shall be sent electronically to all members of the Corporation, within 24 hours of the time that notice or such material is given to the Member Representatives Committee. Meetings of the Member Representatives Committee shall be open to the public, subject to reasonable limitations due to the availability and size of meeting facilities; provided, that the Member Representatives Committee may meet in or adjourn to closed session to discuss matters of a confidential nature, including but not limited to personnel matters, compliance and enforcement matters, litigation, or commercially sensitive or critical infrastructure information of any entity. Any or all members of, and any other participants in, the Member Representatives Committee may participate in a meeting of the Member Representatives Committee by a means of a remote communications system by which all persons participating in the meeting are able to hear each other. A member of the Member Representatives Committee participating in a meeting of the Member Representatives Committee by means of remote communication shall be deemed present in person and shall be entitled to vote at the meeting regardless of whether that meeting is held at a designated place or solely by means of remote communication.

**Section 11 — Waivers of Notice of Meetings of the Member Representatives Committee; and Meeting Adjournments** — Notice of a meeting of the Member Representatives

Committee need not be given to any member of the Member Representatives Committee who signs a waiver of notice, in person or by proxy, whether before or after the meeting, or who attends the meeting without protesting, prior to the conclusion of the meeting, the lack of notice of such meeting. Notice of an adjourned meeting of the Member Representatives Committee need not be given if the time and place to which the meeting is adjourned are announced at the meeting at which the adjournment is taken and if the period of adjournment does not exceed ten (10) days.

**Section 12 — Action Without a Meeting of the Member Representatives Committee —**

Any action required or permitted to be taken at a meeting of the Member Representatives Committee may be taken by the Member Representatives Committee without a meeting if the action is consented to in writing by the number of members of the Member Representatives Committee entitled to vote on the action that would be required to approve the action at a meeting of the Member Representatives Committee with all of its members present and voting, except that in the case of the election of independent trustees, the action may be taken without a meeting only if all members of the Members Representative Committee consent thereto in writing. The call for action without a meeting of the Member Representatives Committee may be initiated by the Chair of the Member Representatives Committee or by any five (5) members of the Member Representatives Committee, which number shall include representatives from at least three (3) ~~sector~~Sectors. Notice of the proposed call for action without a meeting, and all nonconfidential material provided to the Member Representatives Committee in connection with the call for action without a meeting, shall be posted on the Corporation's Web site within 24 hours of the time notice of the call for action without a meeting or such material is provided to the members of the Members Representative Committee. The members of the Member Representatives Committee shall receive written notice of the results, and unless the action was confidential the results shall be posted on the Corporation's Web site, within seven (7) days of the action vote, and all written responses of voting members of the Member Representatives Committee shall be filed with the minutes of the Corporation.

**Section 13 — Other Procedures of the Member Representatives Committee —**~~The chairman of the board in office on November 1, 2006, shall preside at the initial meeting of the Member Representatives Committee, until a chairman is selected in accordance with Section 5 of this Article VIII.~~ Except as to any matter as to which the procedure to be followed by the Member Representatives Committee is expressly set forth in these Bylaws, the Member Representatives Committee may adopt such additional procedures, not inconsistent with these Bylaws, as it deems appropriate.

**ARTICLE IX  
Reliability Standards**

**Section 1 — Development of Reliability Standards —** The Corporation shall develop, implement and, in all regions in which necessary governmental approvals have been obtained or authority has been provided, enforce, ~~reliability standard~~Reliability Standards that provide

for ~~reliable operation~~Reliable Operation of the ~~bulk power system~~Bulk Power Systems of North America. All ~~reliability standard~~Reliability Standards shall be

approved by the ~~board~~Board. All ~~reliability standard~~Reliability Standards of the Corporation shall be posted on its Web site. Nothing in this Article shall be deemed to invalidate any standard of the Corporation that was in effect ~~on November 1, 2006~~as of the date of these Bylaws.

**Section 2 — Procedures for Development of Reliability Standards** — The Corporation shall develop ~~reliability standard~~Reliability Standards pursuant to procedures and processes that shall be specified in the Rules of Procedure of the Corporation. The Rules of Procedure shall provide for the development of ~~reliability standard~~Reliability Standards through an open, transparent, and public process that provides for reasonable notice and opportunity for public comment, due process, and balancing of interests and is designed to result in ~~reliability standard~~Reliability Standards that are technically sound. Participation in the process for development of ~~reliability standard~~Reliability Standards shall not be limited to members of the Corporation but rather shall be open to all persons and entities with an interest in the ~~reliable operation~~Reliable Operation of the ~~bulk power system~~Bulk Power System.

**Section 3 — Procedures for Determinations of Violations of Reliability Standards and Imposition of Sanctions for Violations** — In all regions in which regulatory approval has been obtained or governmental authority has been provided, the Corporation shall consider and make determinations that an owner, operator, or user of the ~~bulk power system~~Bulk Power System has violated a ~~reliability standard~~Reliability Standard, and shall impose sanctions for such violations, pursuant to procedures and processes that shall be specified in the Rules of Procedure of the Corporation. Such procedures and processes shall provide for reasonable notice and opportunity for hearing. Any sanction imposed for a violation of a ~~reliability standard~~Reliability Standard shall bear a reasonable relation to the seriousness of the violation and shall take into consideration efforts of the owner, operator, or user of the ~~bulk power system~~Bulk Power System to remedy the violation in a timely manner. Subject to any necessary action by any applicable governmental authorities, no sanction imposed for a violation of a ~~reliability standard~~Reliability Standard shall take effect until the thirty-first (31) day after the Corporation, where authorized by law or agreement, files with the Commission or other ~~applicable governmental authority~~Applicable Governmental Authority notice of the sanction and the record of the proceedings in which the violation and sanction were determined, or such other date as ordered by the Commission or other ~~applicable governmental authority~~Applicable Governmental Authority or as prescribed by applicable law.

## ARTICLE X Agreements with Regional Entities

**Section 1 — Delegation Agreements with Regional Entities** — The Corporation may, in accordance with appropriate governmental authority, enter into agreements with regional

entities pursuant to which a ~~regional entity~~Regional Entity shall be delegated the authority of the Corporation to enforce ~~reliability standard~~Reliability Standards within a geographic region of North America and may develop and propose ~~reliability standard~~Reliability Standards to be in effect within such region. All delegation agreements with regional entities shall be approved by the ~~board~~Board. No delegation agreement with a ~~regional entity~~Regional Entity shall be effective with respect to a region until the agreement has received any necessary approval from an ~~applicable governmental authority~~Applicable Governmental Authority.

**Section 2 — Standards for Delegation Agreements** — The Corporation shall be permitted to enter into a delegation agreement with a ~~regional entity~~Regional Entity only if the ~~board~~Board determines that (i)

the ~~regional entity~~Regional Entity has agreed to promote, support, and comply with the purposes and policies of the Corporation as set forth in its Certificate of Incorporation, Bylaws, Rules of Procedure, and Reliability Standards as from time to time adopted, approved, or amended; (ii) the ~~regional entity~~Regional Entity satisfies the criteria set forth in Sections 39.3(b) and 39.8 of the Commission’s regulations, or other criteria specified by applicable governmental authorities, and (iii) the delegation agreement will promote effective and efficient administration of the reliability of the ~~bulk power system~~Bulk Power System.

## ARTICLE XI Rules of Procedure

**Section 1 — Development of Rules of Procedure** — The Corporation shall develop and implement such Rules of Procedure as in the judgment of the ~~board~~Board are necessary or appropriate to carry out the purposes of the Corporation and to govern its operations, including without limiting the foregoing, Rules of Procedure relating to (i) registration of owners, operators, and users of the ~~bulk power system~~Bulk Power System; (ii) development of ~~reliability standard~~Reliability Standards; (iii) procedures for standing committees of the Corporation, subgroups of standing committees, and other committees, subcommittees, task forces, and ~~sector~~Sector-specific forums of the Corporation; (iv) critical infrastructure protection; (v) conduct of readiness evaluations and reliability assessments; (vi) enforcement of compliance with ~~reliability standard~~Reliability Standards and determinations of violations of ~~reliability standard~~Reliability Standards by owners, operators, and users of the ~~bulk power system~~Bulk Power System; (vii) impositions of sanctions for violations of ~~reliability standard~~Reliability Standards; (viii) development, implementation, and administration of delegation agreements with regional entities; (ix) personnel certification; (x) event analysis and information exchange; (xi) realtime monitoring of the ~~bulk power system~~Bulk Power System; and (xii) development and administration of budgets, business plans, and funding mechanisms of the Corporation. All Rules of Procedure of the Corporation shall be posted on its Web site.

**Section 2 — Adoption, Amendment, and Repeal of Rules of Procedure** — Except as provided in Section 2 of Article XII, all Rules of Procedure, amendments thereto and repeals

thereof shall be approved by the ~~board~~Board. Proposals to adopt new Rules of Procedure or to amend or repeal existing Rules of Procedure may be submitted by (i) the Member Representatives Committee, (ii) any fifty (50) members of the Corporation, which number shall include members in at least three ~~sector~~Sectors, (iii) a committee of the Corporation to whose purpose and functions the Rule of Procedure pertains, or (iv) an officer of the Corporation. Unless the ~~board~~Board determines that exigent conditions exist requiring adoption of a new Rule of Procedure or amendment or repeal of an existing Rule of Procedure in a shorter time, all proposals for adoption, amendment and repeal of Rules of Procedure shall be posted on the Corporation's Web site and subject to public comment for a minimum of forty-five (45) days prior to action by the ~~board~~Board. All Rules of Procedure and amendments to and repeals of Rules of Procedure approved by the ~~board~~Board shall be submitted to the Commission and to other applicable governmental authorities for approval, and shall not be effective in the United States until approved by the Commission or in Canada or Mexico until approval is obtained from any governmental authority from which approval is required in those countries and subject to any conditions, limitations, or modifications required by the Commission or other governmental authority. Nothing in this Article shall be deemed to invalidate any Rule of

Procedure of the Corporation that was in effect ~~on November 1, 2006~~as of the date of these Bylaws.

## **ARTICLE XII**

### **Personnel Certification Governance Committee**

**Section 1 — Personnel Certification Governance Committee** — There shall be a Personnel Certification Governance Committee of the Corporation, which shall be a standing committee of the Corporation. The purpose of the Personnel Certification Governance Committee shall be to provide oversight to the policies and processes used to implement and maintain the integrity and independence of the Corporation's System Operator Certification Program. The governance authority and structure of the Personnel Certification Governance Committee shall be implemented and maintained so that policies and procedures are established to protect against undue influence that could compromise the integrity of the System Operator Certification process.

**Section 2 — Appointment and Reporting of the Personnel Certification Governance Committee** — The members of the Personnel Certification Governance Committee shall be appointed by the ~~board~~Board from candidates selected and presented by a nominating task force in accordance with Rules of Procedure for the Personnel Certification Governance Committee. Nominations and appointments shall take into account the need to include representatives of all geographic regions of North America on the Personnel Certification Governance Committee. The Personnel Certification Governance Committee shall report directly to the ~~board~~Board and the president of the Corporation regarding governance and administration of the System Operator Certification Program; provided, however, that the



Personnel Certification Governance Committee shall have autonomy in developing and implementing system operator certification eligibility requirements, the development, administration, and scoring of the system operator assessment instruments, and operational processes for the System Operator Certification Program. The Personnel Certification Governance Committee shall provide to the ~~board~~Board periodic assessments, no less frequently than every two (2) years, of the effectiveness of the System Operator Certification Program.

**Section 3 — Administration of the Personnel Certification Governance Committee** — In order to maintain the independence of the Personnel Certification Governance Committee, staff of the Corporation shall administer the System Operator Certification program on behalf of the Personnel Certification Governance Committee on a fee for service basis.

## **ARTICLE XIII Budgets and Funding**

**Section 1 — Compensation of the Board and Member Representatives Committee** —

The ~~board~~Board shall have the right to fix from time to time, by resolution adopted by a majority of the independent trustees then serving as trustees, the amount of the annual retainer fee or other compensation to be paid to the independent trustees for their services to the Corporation, including any fees to be paid for each meeting of the ~~board~~Board or any ~~board~~Board committee attended by an independent trustee. No compensation shall be paid to the management trustee for his or her services on the ~~board~~Board, other than the compensation paid to

the management trustee for services as president of the Corporation. No compensation shall be paid by the Corporation to the members of the Member Representatives Committee for their services on the Member Representatives Committee.

**Section 2 — Preparation and Adoption of Annual Budget, Business Plan, and Funding**

**Mechanism** — The ~~board~~Board shall prepare or cause to be prepared an annual budget for the administrative and other expenses of the Corporation, including the expenditures for the fiscal year for any material special projects undertaken by the Corporation and reasonable and proper reserves and provisions for contingencies, an accompanying business plan for the Corporation, and a funding mechanism, for each fiscal year. The annual budget, business plan, and funding mechanism of the Corporation shall be for a fiscal year commencing on January 1 and ending on December 31. Each annual budget, business plan, and funding mechanism (including the annual budget, annual business plan, and annual funding mechanism for each ~~regional~~ ~~entity~~Regional Entity) shall be approved by the ~~board~~Board at a regular meeting or a special meeting of the ~~board~~Board duly called for that purpose. The ~~board~~Board shall approve each annual budget, business plan, and funding mechanism at least 135 days before the start of the

fiscal year in order to allow for timely submittal of the approved annual budget, business plan, and funding mechanism to the applicable governmental authorities.

**Section 3 — Criteria for Funding Mechanisms** — The annual funding mechanism shall be designed to recover, over the course of the fiscal year, the sum of (i) the annual budget, (ii) less revenues projected to be received by the Corporation from other sources such as sales of services and materials and registration, application and certification fees for programs conducted or administered by the Corporation, and (iii) plus or minus the estimated deficiency or excess of the Corporation’s revenues compared to its expenditures for the current fiscal year. The annual funding mechanism shall consist of such assessments as determined by the ~~board~~Board that result in an equitable allocation of the Corporation’s funding requirement among end users of the North American electric utility system as established in the Corporation’s Rules of Procedure.

**Section 4 — Consultation in Preparation of Annual Budget, Business Plan, and Funding Mechanism** — In preparing the annual budget, business plan, and funding mechanism, the ~~board~~Board shall consult with the members of the Member Representatives Committee, and shall post a draft budget and business plan for review and comment by the members of the Corporation and the Member Representatives Committee and the standing committees of the Corporation for at least thirty (30) days prior to the date of the meeting of the ~~board~~Board at which the annual budget, business plan, and funding mechanism are to be adopted.

**Section 5 — Modified or Supplemental Funding Mechanisms** — During the course of a fiscal year, the ~~board~~Board may modify the approved funding mechanism or develop and approve a supplemental funding mechanism if determined by the ~~board~~Board to be necessary due to such factors as a shortfall in revenues of the Corporation from projected levels, incurred or anticipated expenditures or new projects not provided for in the annual budget, or such other factors as in the judgment of the ~~board~~Board warrant modification of the funding mechanism for the fiscal year or development of a supplemental funding mechanism. In preparing a modified or supplemental funding mechanism, the ~~board~~Board shall follow the provisions of Section 4 of this

Article XIII to the extent possible in the judgment of the ~~board~~Board in light of the exigency of the circumstances necessitating preparation and approval of the modified or supplemental funding mechanism. Each modified or supplemental funding mechanism shall be approved by the ~~board~~Board at a regular meeting or a special meeting of the ~~board~~Board duly called for that purpose.

**Section 6 — Submission of Annual Budgets, Business Plans, and Funding Mechanisms to the Governmental Authorities** — Each annual budget, annual business plan, and annual, modified, or supplemental funding mechanism approved by the ~~board~~Board (including the annual budget, annual business plan, and annual, modified, or supplemental funding mechanism for each ~~regional entity~~Regional Entity) shall be submitted by the Corporation to

the applicable governmental authorities for approval in accordance with its regulations, except as otherwise provided by applicable law or by agreement, and shall not be effective until it has received any necessary approval by the applicable governmental authorities. If a governmental authority by order modifies or remands an annual budget, business plan, or annual, modified, or supplemental funding mechanism, the ~~board~~Board shall promptly following such order adopt such modifications to the budget, business plan, or funding mechanism as are required or directed by the order of the governmental authority.

## **ARTICLE XIV Amendments to the Bylaws**

**Section 1 — Amendments to the Bylaws** — These Bylaws may be altered, amended, or repealed by a majority vote of both the ~~board~~Board and the Member Representatives Committee at respective meetings of the board and the Members Representative Committee at which a quorum is present. Written notice of the subject matter of the proposed changes to the Bylaws shall be provided, as appropriate, to the trustees or to the Member Representatives Committee not less than ten (10) nor more than sixty (60) days prior to the date of the meeting of the board or of the Member Representatives Committee at which the vote is to be taken. Notwithstanding the provisions of this Article XIV, the members of the Corporation voting by ~~sector~~Sector shall have the right to alter, amend, or repeal Bylaws adopted by the ~~board~~Board and the Member Representatives Committee and to adopt new Bylaws, provided that any such alteration, amendment, or repeal or the adoption of new Bylaws is approved by vote of two-thirds of the ~~sector~~Sectors at a meeting of Members called for that purpose, or by written consent of two-thirds of the ~~sector~~Sectors, where the number of votes for and against the proposed alteration, amendment, repeal, or adoption of Bylaws shall be determined in accordance with Section 2 of Article IV. Any alteration, amendment, repeal, or adoption of Bylaws shall be subject to any applicable requirements for filing with or approval by the Commission and any other ~~applicable governmental authority~~Applicable Governmental Authority.

## **ARTICLE XV General**

**Section 1 — Indemnification** — The Corporation shall indemnify its officers, trustees and other corporate agents to the full extent from time to time permitted by the New Jersey Nonprofit Corporation Act and other applicable law. Such right of indemnification shall

inure to the benefit of the legal representative of any such person. The foregoing indemnification shall be in addition to, and not in restriction or limitation of, any privilege or power that the Corporation may have with respect to the indemnification or reimbursement of its trustees, officers, or other corporate agents. The Corporation shall also pay or advance expenses incurred by an officer, trustee, or other corporate agent in connection with a proceeding in advance of the final disposition of the proceeding upon receipt of an undertaking

by or on behalf of the officer, trustee, or other corporate agent to repay the amount unless it shall be ultimately determined that the officer, trustee, or other corporate agent is entitled to be indemnified by the Corporation.

**Section 2 — Parliamentary Rules** — In the absence of and to the extent not inconsistent with specific provisions in these Bylaws, meetings or other actions pursuant to these Bylaws shall be governed by procedures that the ~~board~~Board may, from time to time, establish by resolution.

**Section 3 — Dissolution** — Upon dissolution of the Corporation, in accordance with paragraph TENTH of the Certificate of Incorporation, the remaining assets of the Corporation after payment of debts shall be distributed in the manner determined by the ~~board~~Board, provided, (i) that no part of the assets shall be distributed to any trustee of the Corporation, and (ii) that the distribution of assets shall be consistent with the requirements of Section 501(c)(6) of the United States Internal Revenue Code of 1986, as amended.

## **Responses to the Board's Request for Policy Input**

### **Action**

Discussion

### **Background**

The policy input letter is issued by the Chair of the NERC Board of Trustees (Board) four to five weeks in advance of the quarterly meetings and includes relevant materials necessary to inform and prepare for discussion. Written input from the Member Representatives Committee (MRC) and stakeholders is due three weeks after issuance and is then revisited during a dedicated discussion time on the MRC's agenda, in the presence of the Board.

### **Summary**

For this quarter, the Board requested specific policy input on the Electricity Information Sharing and Analysis Center (E-ISAC) Long-Term Strategic Plan. In addition, the Board requested input on preliminary Board, Board Committee, and MRC agenda topics. On August 20, 2020, the MRC can expect to participate in discussion on the responses received from the policy input request.

### **Attachment**

1. July 15, 2020, Board Letter Requesting Policy Input (*without attachments*)

July 15, 2020

Ms. Jennifer Sterling, Chair  
NERC Member Representatives Committee

Dear Jennifer:

I invite the Member Representatives Committee (MRC) to provide policy input on a matter of particular interest to the NERC Board of Trustees (Board) as it prepares for its August 19-20, 2020, meetings, which will occur via teleconference due to the coronavirus (COVID-19) outbreak. In addition, policy input is requested on any items on the preliminary agendas for the quarterly Board, Board Committees, and MRC meetings. The preliminary agendas are included in the [MRC Informational Session agenda package](#) (see Item 2) and are attached hereto (**Attachment A**). The MRC's August agenda includes an opportunity for MRC members to provide additional input to the Board on the final agenda and materials. **As a reminder, please include a summary of your comments in your response (i.e., a bulleted list of key points) for NERC to compile into a single summary document to be provided to the Board for reference, together with the full set of comments.**

### **Electricity Information Sharing and Analysis Center (E-ISAC) Long-Term Strategic Plan**

In 2017, the E-ISAC developed the E-ISAC's Long-Term Strategic Plan, with guidance from the ESCC Member Executive Committee (MEC) and other stakeholder groups. The purpose of the Strategic Plan was to better define the E-ISAC's mission and priorities, and focus its resources to help the electric sector protect against and mitigate the risks of escalating cyber and physical security threats. In April and May 2017, respectively, the MEC endorsed and the Board accepted the Strategic Plan.

As part of management's planning efforts for 2020 and 2021, the E-ISAC assessed the Strategic Plan to: (1) measure the E-ISAC's progress to date; (2) confirm the E-ISAC's strategic and operational focus; (3) evaluate and refine its products and services; (4) optimize resource planning and allocation; and (5) identify additional areas to provide value to members. Working with the MEC, the E-ISAC updated the Strategic Plan based on this assessment (**Attachment B**). In updating the Strategic Plan, the E-ISAC conducted quantitative assessments of critical infrastructure ISACs to measure itself against those ISACs. A key finding of the assessment was that the E-ISAC is a well-established organization, with comparable resources and offerings to the top tier of the assessment group.

The updated Strategic Plan describes the E-ISAC's near-term and long-term strategic and operational focus. In the near-term (1-2 years), the E-ISAC's primary focus will be improving the effectiveness and efficiency of current products, platforms, and services. The E-ISAC will also sharpen its focus and execution in building and maintaining membership by demonstrating value through improved analysis,

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timely sharing of actionable information, and collaboration with key government and strategic partners, while also ensuring that E-ISAC operations are both effective and efficient.

For the long-term horizon (3-5 years), the E-ISAC will focus on providing additional value to members and other stakeholders in four key areas: (1) enhancing its analytical capabilities (both internal and in partnership with third parties); (2) identifying, analyzing, and sharing operational technology risks and risk mitigation strategies; (3) developing enhanced capabilities to share critical threat and intelligence information to provide timely and actionable information to the sector; and (4) extending E-ISAC services and capabilities to support the downstream natural gas sector, given cross-sector interdependencies.

The E-ISAC will request MEC endorsement of the updated draft of the Strategic Plan during the MEC's meeting in July 2020 and Board acceptance of the Strategic Plan at the Board's August 2020 meeting.

**The Board requests MRC policy input on the following:**

- 1. Do you agree on the near-term and long-term strategic and operational focus areas described in the updated draft of the Strategic Plan?**
- 2. Are there any other areas on which you would recommend the E-ISAC focus its resources to fulfill its mission and bring additional value to its members?**

At their August meetings, the MRC and Board will discuss and may take action to approve amendments to the NERC Bylaws. The proposed amendments will also be discussed at the MRC Informational Session on July 22, 2020. NERC management comprehensively reviewed the NERC Bylaws at the Board's request and identified the proposed revisions to clarify certain requirements, incorporate the Board's feedback on certain governance matters, improve internal document consistency, and align certain provisions with applicable law. An explanatory memo with a redline of the NERC Bylaws was distributed to MRC members on July 1, 2020 for review and comment. Any final clarifications will be identified at the MRC Informational Session. Following MRC and Board approval, NERC will file the proposed amendments with the Federal Energy Regulatory Commission for approval.

Written comments in response to the input requested above, the preliminary agenda topics, and on other matters that you wish to bring to the Board's attention are due by **August 5, 2020**, to Kristin Iwanechko, MRC Secretary ([Kristin.Iwanechko@nerc.net](mailto:Kristin.Iwanechko@nerc.net)). The formal agenda packages for the Board, Board Committees, and MRC meetings will be available on August 6, 2020, and the presentations will be available on August 13, 2020. The Board looks forward to your input and discussion of these matters during the August 2020 meetings.

Thank You,



Roy Thilly, Chair  
NERC Board of Trustees

cc: NERC Board of Trustees  
Member Representatives Committee



## **Additional Policy Discussion of Key Items from Board Committee Meetings**

### **Action**

Discussion of specific items presented at the Board of Trustees (Board) Committee meetings. Staff presentations made at the Board Committee meetings will not be duplicated at the Member Representatives Committee (MRC) meeting.

### **Summary**

On August 20, 2020, the MRC will have additional time for policy discussion, as part of its own agenda, to respond to the information that is presented during the Board Committee meetings.

The Board committee agendas and associated background materials will be posted on the following webpages approximately one to two weeks in advance of the meetings:

[Corporate Governance and Human Resources Committee](#)

[Technology and Security Committee](#)

[Finance and Audit Committee](#)

## **MRC Input and Advice on Board Agenda Items and Accompanying Materials**

### **Action**

Discussion

### **Background**

Article VIII, Section 1 of the [NERC Bylaws](#) states that the MRC shall have the right and obligation to “provide advice and recommendations to the board with respect to the development of annual budgets, business plans and funding mechanisms, and other matters pertinent to the purpose and operations of the Corporation.”

In the policy input letter issued on July 15, 2020, the NERC Board of Trustees (Board) requested comments on the preliminary agenda topics for the August Board meeting that were reviewed during the July 22, 2020 MRC Informational Session. At the August 20, 2020, meeting, MRC members should come prepared to provide input on behalf of their sectors on the Board’s formal agenda package posted on August 6, 2020.

## **Update on FERC Reliability Matters**

### **Action Information**

### **Summary**

At the August 20, 2020, MRC meeting, Andrew Dodge, Director, Office of Electric Reliability, FERC, will provide an update on recent FERC activity.

## Update on Cloud Computing

### Action

Information

### Summary

Emerging technologies, particularly cloud computing, are rapidly driving new business and service models. The advances in communications and cloud computing are beginning to play a major role in monitoring, controlling, and improving the energy infrastructure. Cloud computing and its increased use highlight the importance of finding balance among fostering innovation, managing cyber risks, and enforcing regulation. As the world of business overall, not just the electric utility industry, transitions to increased reliance on these emerging technologies, NERC supports industry efforts to adopt innovative approaches in ways that appropriately manage and mitigate continuing cyber risks.

During this update, NERC staff will provide an update from the perspective of four future-state use cases related to virtualization and cloud computing. The update will describe the distinctions in the use cases (as just “virtualization” and “cloud” over-simplify the variety of usage) and identify areas of consideration necessary to move forward with technology modernization. In addition, NERC staff will highlight current challenges and how NERC and industry are addressing them, or would support addressing them in the future, as technology advances. For some use cases, measures have already been put in place that assist industry partially or fully realize the desired end state. In other use cases, NERC continues to support industry in its efforts to make the appropriate, risk-informed enhancements to the suite of CIP Reliability Standards (e.g., Reliability Standards Projects 2016-02 and 2019-02) that are necessary to enable the framework for those solutions in this new technology paradigm.

The discussion will address the following four use case scenarios:

- **Virtualization and Cloud Computing:** Many often conflate the use of virtualization, which is a technology that allows one to create multiple simulated environments from a single physical hardware system, with cloud computing, which are IT environments that abstract, pool, and share scalable resources. Virtualization can occur with a registered entity’s own hardware, or virtualization can occur in the cloud (or in combination), which further complicates the concepts. The update will describe the distinction, along with current CIP Reliability Standards’ application and where further consideration is necessary to support more advanced usage in the future.
- **Cloud usage and storage of BES Cyber System Information (BCSI):** Cloud usage can be fairly straightforward, such as for storing back-ups, data, and other non-computational items. It can also be highly complicated, to include all computational processes being virtualized wholly in the cloud environment. For the former, the ERO Enterprise has developed a [CMEP Practice Guide](#) to provide guidance to ERO Enterprise staff when assessing a registered entity’s process under the current CIP standards to authorize access to designated storage locations for BCSI, which may include cloud storage.

- **Cloud usage with electronic access monitoring and physical security monitoring:** Adding complexity to the use case related to storing BCSI, there are emerging use cases where certain computational services themselves are also provided in a cloud-based environment. Service providers that perform forensics and/or log analysis are increasingly cloud-based. The ERO Enterprise supports the adoption of cloud-based logging and analysis services that are coupled with appropriate mitigating controls.
- **BES Operations in the Cloud:** Use of cloud services for BES Operations is emerging. The ERO Enterprise is proactive from a regulatory perspective in monitoring and evaluating this transition, but there are also specific components of the current CIP Reliability Standards that are inconsistent with this emerging paradigm. The ERO Enterprise fully supports the development of a secure and trustworthy cloud-computing framework for power grid applications. The current CIP Version 5 standards were developed within a framework that was very hardware-centric, and some of the emerging use cases are directly contradicted by the requirements in the existing standards. NERC would fully support industry in revising the suite of CIP Reliability Standards to enable this framework.