

**BEFORE THE  
BRITISH COLUMBIA UTILITIES COMMISSION  
OF THE PROVINCE OF BRITISH COLUMBIA**

**NORTH AMERICAN ELECTRIC )  
RELIABILITY COUNCIL )  
and )  
NORTH AMERICAN ELECTRIC )  
RELIABILITY CORPORATION )**

**NOTICE OF FILING  
AS THE ELECTRIC RELIABILITY ORGANIZATION**

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April 4, 2006

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## **ATTACHMENTS AND EXHIBITS**

- Exhibit A** Certificate of Incorporation of NERC-Corporation
- Exhibit B** Proposed Bylaws of NERC-Corporation
- Exhibit C** NERC’s Rules of Procedure, which contain the following sections and appendices:
- Section 100** Applicability of Rules of Procedure
  - Section 200** Definitions of Terms
  - Section 300** Reliability Standards Development
  - Section 400** Compliance Enforcement
  - Section 500** Organization Registration and Certification
  - Section 600** Personnel Certification
  - Section 700** Reliability Readiness Audit and Improvement
  - Section 800** Reliability Assessment and Performance Analysis
  - Section 900** Training and Education
  - Section 1000** Situation Awareness and Infrastructure Security
  - Section 1100** Annual NERC Business Plans and Budgets
  - Section 1200** Regional Delegation Agreements
  - Section 1300** Committees
  - Section 1400** Amendments to the NERC Rules of Procedure
- Appendix 1** Reliability Standards Development Procedures
- Appendix 2** Procedure for the Election of Members of the NERC Standards Authorization Committee
- Appendix 3** Audit of Regional Compliance Programs
- Appendix 4** ERO Sanction Guidelines
- Appendix 5** NERC Organization Registration and Certification Manual
- Appendix 6** System Operator Certification Program Manual
- Appendix 7** NERC Readiness Audit Procedure
- Appendix 8** NERC Blackout and Disturbance Response Procedures
- Exhibit D** Pro Forma Regional Delegation Agreement (“RDA”)
- Exhibit E** NERC Transition Plan

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This Notice of Filing as the Electric Reliability Organization (“ERO”) is made by the North American Electric Reliability Council (“NERC Council”) on behalf of its affiliate, the North American Electric Reliability Corporation (“NERC Corporation”) (together, “NERC”). In a companion filing, NERC provides notice of 102 reliability standards. On this day, NERC has also filed an Application for Certification as the ERO with the U.S. Federal Energy Regulatory Commission (“FERC”), an Application for Recognition as the Electric Reliability Organization with the Provinces of Alberta, Nova Scotia, and Ontario and the National Energy Board, and a Notice of Filing as the Electric Reliability Organization with the Provinces of Manitoba, New Brunswick, Québec, and Saskatchewan.<sup>1</sup>

NERC is filing this Notice to provide the British Columbia Utilities Commission with a description of the proposed new organization and a description of this new organization’s relationship with the existing regional reliability councils and the anticipated Regional Entities.

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<sup>1</sup> NERC files today Applications for Recognition with those jurisdictions in Canada that have the authorities to allow any or all of the above to occur: (1) make reliability standards developed by NERC mandatory and enforceable; (2) backstop compliance determinations made by NERC and regional entities and allow disclosure of a provincial enforcement determination once that determination is made; (3) assure NERC’s recovery of a fair allocation of reasonable costs of carrying out the purposes for which the electric reliability organization was formed. For those jurisdictions that do not possess the authority at this time to allow for any of the above to occur, NERC files today a “Notice of Filing of an Electric Reliability Organization.”

NERC recognizes that British Columbia utilities have contractual relationships with the Western Electricity Coordinating Council (“WECC”) and expects that those relationships will continue in the future. The regional reliability council’s relationship with NERC, however, will change in light of the passage of the *Energy Policy Act of 2005* in the United States, since regional reliability councils are not recognized in the U.S. legislation. While NERC recognizes that there may be no authorities currently for the Province to recognize the ERO as the reliability standard-setting body, NERC believes that a description of NERC’s relationship with the entities that will allow for mandatory reliability standards in British Columbia is important as NERC requests certification or recognition by other governmental authorities in the United States and Canada.

**I. NOTICES AND COMMUNICATIONS**

Notices and communications regarding this Notice may be addressed to:

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**II. DESCRIPTION OF APPLICANTS**

NERC Council is a New Jersey non-profit corporation whose members are the eight regional reliability councils.<sup>2</sup> Since its formation in 1968, NERC Council has successfully operated as a self-regulatory organization, relying on reciprocity, and the mutual self-interest of

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<sup>2</sup> Electric Reliability Council of Texas (“ERCOT”), Florida Reliability Coordinating Council (“FRCC”), Midwest Reliability Organization (“MRO”), Northeast Power Coordinating Council (“NPCC”), ReliabilityFirst Corporation (“ReliabilityFirst”), Southeastern Electric Reliability Council (“SERC”), Southwest Power Pool (“SPP”), and Western Electricity Coordinating Council (“WECC”).

owners, operators, and users of the Bulk Power System in order to ensure that the Bulk Power System in North America is reliable, adequate, and secure.

NERC Corporation is also a New Jersey nonprofit corporation and is an affiliate of NERC Council. NERC Corporation was formed for the sole purpose of becoming the ERO. As set forth in detail in this Notice, NERC Corporation's members will be a broad body of electricity industry stakeholders and other entities interested in the reliability of the Bulk Power System in North America. Once NERC has been certified as the ERO by FERC, NERC Council, NERC Corporation, and the eight regional reliability councils intend to approve a plan pursuant to which NERC Council and NERC Corporation will be merged. While NERC Council and its Members have not yet agreed on the specific terms of the plan of merger, NERC expects that NERC Corporation will be the surviving corporation following the merger and will assume the assets and liabilities of NERC Council and that NERC Council will cease to exist. The certificate of incorporation and bylaws attached to this Notice will be the certificate of incorporation and bylaws of the surviving corporation. NERC is following this approach because until such time as the new ERO is fully authorized, it is vital to the ongoing reliability of the Bulk Power System of North America that NERC Council operate under its present corporate structure.<sup>3</sup>

### **III. NERC HAS THE ABILITY TO DEVELOP AND ENFORCE RELIABILITY STANDARDS ON AN INTERNATIONAL BASIS**

NERC is uniquely qualified to become the ERO for all of North America. NERC has established a governance and organizational structure, staffing, as well as rules, procedures and systems that promote excellence in the development and enforcement of Reliability Standards

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<sup>3</sup> For reliability purposes, throughout this Notice, NERC's Reliability Standards, and NERC's Rules of Procedure, NERC uses the term "load serving entity" as it is defined in NERC's Glossary of Terms.



that protect the reliability, adequacy, and security of the North American Bulk Power System. In addition, NERC's rules and procedures:

- Ensure its independence of users, owners and operators of the Bulk Power System while ensuring fair stakeholder representation in the selection of its directors and balanced decision making in ERO committees and subordinate organizational structures.
- Provide for ERO committees 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.
- Provide for fair and impartial enforcement procedures.
- Provide for equitable allocation of dues, fees and other charges.

**A. NERC Council has Unparalleled Experience Working to Ensure the Reliability of the North American Bulk Power System.**

NERC Council has unparalleled experience in performing the functions and activities necessary to be a successful ERO. NERC Council has been promoting and evaluating North American Bulk Power System reliability and developing operating policies and planning standards for maintaining reliability for almost 40 years. In response to the 1965 blackout in the northeastern United States and eastern Canada, NERC Council was formed in 1968 as a voluntary electric reliability organization. Throughout its history, NERC Council's activities have been funded directly by its members, the regional reliability councils of North America, and indirectly by the members of those regional councils. In 2001, NERC Council fundamentally revised its governance structure by changing its Bylaws to provide for governance by an independent Board of Trustees, and establishing a broad-based industry Stakeholders Committee that elects the Board, votes on Bylaws amendments and advises the Board on other operational and financial matters.

**Standards Development** — NERC has extensive experience in developing and implementing Bulk Power System Reliability Standards. Since its inception, NERC Council has developed and implemented operating policies and planning standards, and measured and reported on reliability, to promote the reliability of the Bulk Power System in North America. These policies and standards have been developed and implemented by NERC Council’s professional staff working in partnership with hundreds of volunteer technical subject matter experts from the electric industry, government and academia in the United States and Canada, in the model of an SRO.

NERC has an established Reliability Standards Development Procedure (Appendix 1 to Exhibit C to this Notice), which has been accredited by the American National Standards Institute (“ANSI”) and conforms to ANSI’s criteria for an effective industry Reliability Standards development process. In response to the blackout of August 2003, NERC Council transformed its existing operating and planning standards into Version 0 Reliability Standards, which became effective on April 1, 2005.<sup>4</sup> These Reliability Standards are a comprehensive and measurable set of Reliability Standards for the Bulk Power System, and will make an excellent building block for establishing mandatory Reliability Standards throughout North America. NERC Council has continued to improve and expand these Reliability Standards through its open Reliability Standards development procedure.

**Compliance and Enforcement** — NERC Council has an established Compliance Enforcement Program that has been in operation since 1999. Each year, the program is assessed and modified to incorporate lessons learned. The maturity and effectiveness of the current program reflects the cumulative improvements made over its seven years of existence. Section IV.C of this Notice describes NERC’s fair and impartial procedures that it will use to encourage

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<sup>4</sup> In a companion filing, NERC provides notice of its Reliability Standards.

and enforce compliance with Reliability Standards. Section 400 of the Rules of Procedure (Exhibit C to this Notice) describes in detail how NERC will ensure and enforce compliance with Reliability Standards.

**Reliability Assessments** — NERC has a long history of conducting and publishing assessments of the reliability and adequacy of the North American and regional Bulk Power Systems, and has established procedures for conducting and reporting the results of such assessments (see Section 800 of NERC’s Rules of Procedure included in Exhibit C to this Notice). NERC also has extensive experience in event investigation and analysis.

NERC conducted an extensive investigation of the August 2003 blackout in the northeastern and midwestern United States and southeastern Canada, identified root causes, and recommended a comprehensive set of corrective actions for owners, operators and users of the Bulk Power System intended to prevent future occurrences of this nature. NERC has also been involved in the investigation of a number of previous wide-area blackouts and other Bulk Power System events. Based on those experiences, NERC developed the blackout and disturbance response procedures included as Appendix 8 to Exhibit C of this Notice.

**Reliability Readiness Audits and Improvement** — NERC established a program in February 2004 for conducting reliability readiness audits for industry participants. This was one of the principal NERC recommendations to address the causes of the August 2003 blackout and is used to enhance the readiness of and promote excellence in operations among industry participants. NERC has adopted a Readiness Audit and Improvement Program Procedure and Appeals Process as well as Rules of Procedure for conducting Reliability Readiness Audits (see Section 700 of NERC’s Rules of Procedure and Appendix 7, both included in Exhibit C to this Notice).

**Situation Awareness, Infrastructure Protection and Reliability Support Tools** — NERC Council develops critical infrastructure protection standards and guidelines, and develops reliability support tools and systems for reliability coordinators and other system operators to assist in their situation awareness. NERC Council serves as the Electricity Sector’s Coordinating Council and operates the Electricity Sector Information Sharing and Analysis Center (“ESISAC”).

**Training and Personnel Certification** — NERC Council certifies Bulk Power System operating personnel pursuant to a program that meets the requirements established by the U.S. National Commission for Certifying Agencies. The certification program includes dispute resolution processes and disciplinary action procedures (see Section 600 of NERC’s Rules of Procedure included in Exhibit C and Appendix 6). NERC Council also administers a Continuing Education Program that approves training activities and training providers to enable operating personnel to obtain quality continuing education hours for credit toward operator recertification.

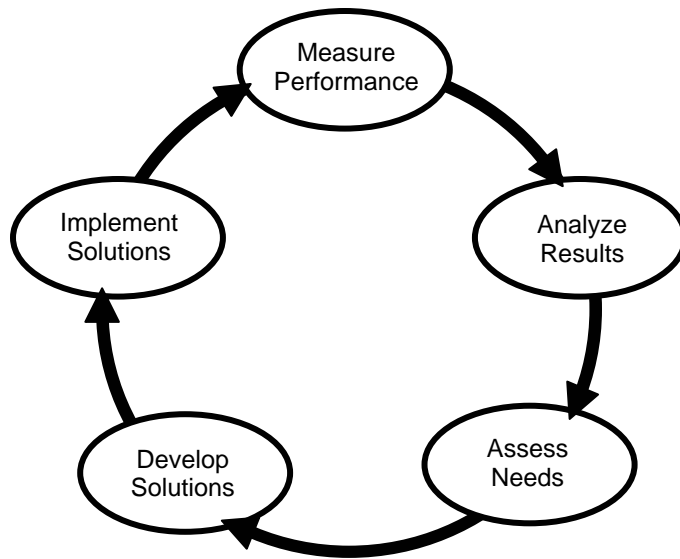
**International Scope** — NERC’s operations are, and long have been, international in scope. The Canadian electric industry has long participated in the activities of NERC Council, and NERC’s development of operational policies and procedures and planning standards has encompassed the needs and requirements of Canadian industry participants. Three of NERC Council’s members include territorial portions of Canada. Additionally, representatives from the National Energy Board and the provinces are members of the NERC Stakeholder Committee and regularly attend meetings of that committee and the Board of Trustees. As a result, NERC has extensive experience in securing the involvement of Canadian participants in activities essential to ensuring the reliability of the North American Bulk Power System, and in addressing the needs of Canadian industry participants in this regard.

**Coordination with NAESB** — NERC also has an established and well-defined role in interfacing with the North American Energy Standards Board (“NAESB”) to ensure (1) that electric industry commercial standards and practices do not adversely impact Bulk Power System reliability, and (2) correspondingly, that operating and planning standards established to assure Bulk Power System reliability do not unduly impact competition and commerce.

**Summary** — NERC’s extensive experience with international participants and requirements, Reliability Standards development and implementation, compliance monitoring, reliability and adequacy assessments, event investigation and analysis, reliability readiness audits, critical infrastructure protection, personnel certification, and other areas described in more detail in this Notice, fully support NERC’s qualifications as the ERO and will provide NERC with strong foundation for operating successfully as the North American ERO.

**B. NERC has a Strong Vision for the Structure and Effective Operation of the North American ERO.**

NERC Council’s historic mission and the mission of the ERO are coterminous: to continuously promote and improve the reliability, adequacy and security of the Bulk Power System in North America. NERC’s philosophy for accomplishing this mission is based on a continuous cycle of activities to achieve reliability improvements: (1) measuring reliability performance – past, present and future; (2) analyzing and benchmarking the results of those measurements; (3) identifying problems and assessing needs for improvement; (4) developing solutions to address those problems and needs, including new or revised Reliability Standards; and (5) implementing solutions, including expanded compliance monitoring and enforcement of Reliability Standards. This ongoing cycle of activities promotes continuous and measurable improvements in reliability.



NERC’s vision is consistent with “audited self-regulation.” To implement audited self-regulation, NERC will build upon a set of programs whose goals and objectives include Reliability Standards, compliance and certification, reliability readiness, training and personnel certification, reliability assessments and performance analysis, and situation awareness and infrastructure security. NERC’s mission as the ERO incorporates these fundamental principles:

- Developing, implementing and enforcing strong Reliability Standards that are international in scope and consistently applied throughout the North American Bulk Power System, allowing for regional differences where driven by compelling need.
- Insisting on strict compliance with Reliability Standards through an independent and rigorous program of compliance audits conducted by NERC and (pursuant to delegation agreements) the Regional Entities.
- Using monetary and non-monetary penalties for noncompliance that encourage compliance and remediation and recognize the relative severity and importance of violations of individual Reliability Standards.
- Establishing and promoting a culture of excellence in Bulk Power System planning and operations by identifying areas for improvement and examples of excellence through periodic reliability readiness audits.
- Promoting continuous reliability performance improvement through independent reliability and adequacy assessment and reporting; investigating, analyzing and

sharing “lessons learned” about Bulk Power System events; and developing reliability performance metrics and benchmarks.

- Developing and implementing personnel training, education, and certification programs that encourage and enable compliance with Reliability Standards and promote excellence in reliable Bulk Power System planning and operation.
- Reducing vulnerability and improving mitigation and protection of the industry’s critical infrastructure by performing a critical role in real-time situation awareness and by serving as the ESISAC and Sector Coordinating Council.

Audited self-regulation also means that NERC will:

- Emphasize technical excellence and rely on voluntary technical subject matter expertise from the industry, academia and government to support all aspects of the ERO’s mission.
- Maintain and enhance strong and productive relationships with other institutions and stakeholder groups to promote bulk power system reliability.
- Cooperate with all appropriate authorities and levels of government in the United States and Canada

**C. NERC has the Expertise Necessary to be an Effective International ERO.**

**1. NERC has an Independent Board of Trustees Comprising Highly Qualified Individuals That Together Encompass the Necessary Disciplines and Expertise to Lead an Effective International ERO.**

One of NERC’s fundamental principles is governance by a strong Board of Trustees (i) that is selected by, but independent of, industry stakeholders; (ii) that is international in nature; and (iii) whose members collectively possess expertise in the areas necessary for an effective ERO, including management, engineering, industry operations, law and regulation, and government relations. The Board has ultimate responsibility for all of NERC’s functions, including approving Reliability Standards, electing and appointing officers, appointing committees, oversight of all ERO programs, and budgetary and financial matters.

In 2001, NERC Council amended its Bylaws to provide for a fully *independent* Board of Trustees. Since that time, NERC Council has been successful in attracting highly qualified

individuals with a wide range of backgrounds and expertise to stand for election as its independent Board members. The current Board of NERC Council, which will be the Board of NERC Corporation when the two entities merge, is well-qualified to lead the ERO effectively and efficiently.

**Richard Drouin** is the current Chair of NERC Council's Board. He was first elected to the Board in 1999. A lawyer by training, Mr. Drouin served as Chairman and Chief Executive Officer of Hydro-Quebec from 1988–1995, and is currently Chairman of Abitibi-Consolidated, the largest newsprint manufacturer in the world. Mr. Drouin is also a governor of the National Academies of Science of Canada, a member of the National Round Table on Environment and Economy of Canada, and an Officer of the Order of Canada.

**Thomas W. Berry**, the current Vice Chair of NERC Council's Board, was formerly a partner in Goldman, Sachs & Co., with senior responsibilities for utilities and telecommunications companies, and brings extensive financial expertise to the Board. He was first elected to the Board in 1999. Mr. Berry is a graduate of Brown University and holds an M.B.A. degree from the Harvard University Graduate School of Business.

**John Q. Anderson** has served on the Board of NERC Council since 1999, and is chair of the Board's Corporate Governance and Human Resources Committee. Mr. Anderson has been a partner with McKinsey & Company and a senior executive with CSX and Burlington Northern Santa Fe, and is presently Chairman of BigWheel Partners, Inc., a private equity firm investing in transportation and logistics companies. Mr. Anderson earned an engineering degree from Stanford University and an M.B.A. degree from the Harvard University Graduate School of Business.

**Paul F. Barber**, Ph.D., elected to the Board in 2005, is a senior executive with extensive technical knowledge and leadership in the electric power industry. He brings engineering expertise and experience with regional council operations to the Board. Dr. Barber has held numerous leadership positions for NERC Council and for several regional reliability councils, including ERCOT, MAAC, NPCC (serving on the executive committee) and WECC, as well as for other electric industry organizations. He has also held senior executive positions with Edison Mission Marketing and Trading and with Citizens Power and its predecessors. Dr. Barber was a career officer in the U.S. Army Corps of Engineers, including serving for 12 years on the engineering faculty of the United States Military Academy. He holds a B.S. degree from the U.S. Military Academy, M.S. degrees in Civil Engineering and Electrical Engineering from the University of Illinois, and a Ph.D. in Electric Power Engineering from Rensselaer Polytechnic Institute. Dr. Barber served as facilitator for the NERC Steering Group as it led the investigation of the August 2003 blackout.



**James M. Goodrich**, Ph.D., was first elected to the Board in 1999, and is chair of the Board's Compliance Committee. He founded Energy Management Associates ("EMA"), a company providing operations and financial planning software and related consulting services to the electric and gas utility industries, and served as its Executive Vice President until 1992. During his tenure with EMA, Dr. Goodrich consulted with over 100 utility clients. Dr. Goodrich holds Ph.D., M.S. and B.S. degrees in engineering from Stanford University and an M.S. degree from George Washington University. He served as an officer in the U.S. Navy assigned to the Atomic Energy Commission on the staff of Admiral Hyman Rickover.

**Donald P. Hodel** was first elected to the Board in 2001, and is chair of the Board's Nominating Committee. Mr. Hodel's long career in senior government service positions provides a unique perspective on the importance of energy and the Bulk Power System to the economy. He previously served as Secretary of the U.S. Department of Energy and as an Under-Secretary and Secretary of the Department of the Interior. Mr. Hodel has also served as President of the National Electric Reliability Council (former name of NERC Council) and as Deputy Administrator and Administrator of the Bonneville Power Administration. Mr. Hodel is the founder and a Managing Director of the Summit Energy Group companies and Chairman of Summit Power Group, Inc. He was awarded the Presidential Citizens Medal by President Reagan in 1989.

**Sharon L. Nelson** was first elected to the Board of NERC Council in 1999, and brings state regulatory and consumer protection perspectives to the Board. She currently is the Chief of the Consumer Protection Division of the Attorney General's Office of the State of Washington. She is also chair of the Board of Directors for the Consumers Union. Ms. Nelson served two terms as Chairman of the Washington State Utilities and Transportation Commission from 1985 to 1997; during that tenure, she also served as President of the National Association of Regulatory Utility Commissioners in 1989–1990. She was the Director of the Shidler Center for Law, Commerce and Technology at the University of Washington School of Law from 2000 to 2003. Ms. Nelson received a B.A. from Carleton College, an M.A.T. from the University of Chicago, and a J.D. from the University of Washington.

**Bruce A. Scherr**, Ph.D., was first elected to the Board in 2002, and is chair of the Board's Finance and Audit Committee. He is president and chief executive officer of Informa Economics, Inc. and has been president of predecessor and affiliated companies. Dr. Scherr has worked extensively with companies to develop improved price risk management procedures and merchandising programs, and to assist agribusinesses and public sector institutions in strategic and tactical planning. As a divisional vice president at Data Resources, Inc., he developed and utilized for the public and private sectors the first commercially available econometric model for U.S. agriculture. Dr. Scherr serves as a member of the Global Strategy Institute Advisory Council of the Center for Strategic and International Studies, and was a member of the board of directors of Desert STAR Inc. from 2000–2002. He is a former advisor to the President's Council of Economic Advisors and NASA. Dr. Scherr received a B.A. degree from Rutgers University and M.A. and Ph.D. degrees from Purdue University, all in Agricultural Economics.

**Fred Gorbet** is currently the CIT Chair in Financial Services and co-director of the Financial Services Program at the Schulich School of Business, York University, as well as a consultant on public policy and corporate director. Previously, he held numerous positions in the public service of Canada, including serving as assistant secretary to the Cabinet and Deputy Minister of Finance. Dr. Gorbet served as senior policy advisor to the Canadian Department of Energy, director of policy for the International Energy Agency, and chair of the Market Surveillance Panel for the Ontario Electricity Market, and also held senior executive positions in the insurance industry. Dr. Gorbet holds a BA from York University and a PhD in Economics from Duke University. He is a member of the Advisory Council to the Dean of the Schulich School of Business and an honorary governor of York University. Other directorships include Assuris, Alterna Savings, Alterna Bank, LawPRO, the Credit Union Central of Ontario, the Institute for Research in Public Policy, Covenant House Toronto, and the North York Harvest Food Bank. He is an officer of the Order of Canada. Dr. Gorbet was elected to the NERC board in 2006.

**Kenneth G. Peterson** was also elected to the Board in 2006. He was formerly President and Chief Executive Officer of Powerex Corp., a leading marketer of wholesale energy products and services in western Canada and the western U.S. Mr. Peterson has held positions as Director of Planning at BC Hydro and Power Authority and as Economic Consultant with the Westwater Research Centre at the University of British Columbia, and has served on the boards of directors of the Western Electricity Coordinating Council and the Western Regional Transmission Association. Mr. Peterson holds a B.A. in Economics from the University of British Columbia and a M.A. in Economics from Northwestern University.

NERC's Bylaws provide for its Board members to be independent, which is defined to mean that a Trustee cannot be an officer or employee of NERC, a member or an officer, director or employee of a member of NERC, or an officer, director or employee of any entity that would reasonably be perceived as having a direct financial interest in the outcome of any board decisions and who does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a Trustee. Bylaws, Article III, § 3, attached to this Notice as Exhibit B.

Nominees for election to the Board of NERC Corporation will be chosen by a nominating committee that will include representatives of NERC's membership. *Id.* at Article III, §5. Both the current Bylaws of NERC Council and the Bylaws of NERC Corporation task the nominating

committee to endeavor to nominate candidates for election consistent with the objectives that the Board as an entirety reflects expertise in the areas of technical electrical operations and reliability, legal, market, financial and regulatory matters, familiarity with regional system operation issues, and geographic diversity.

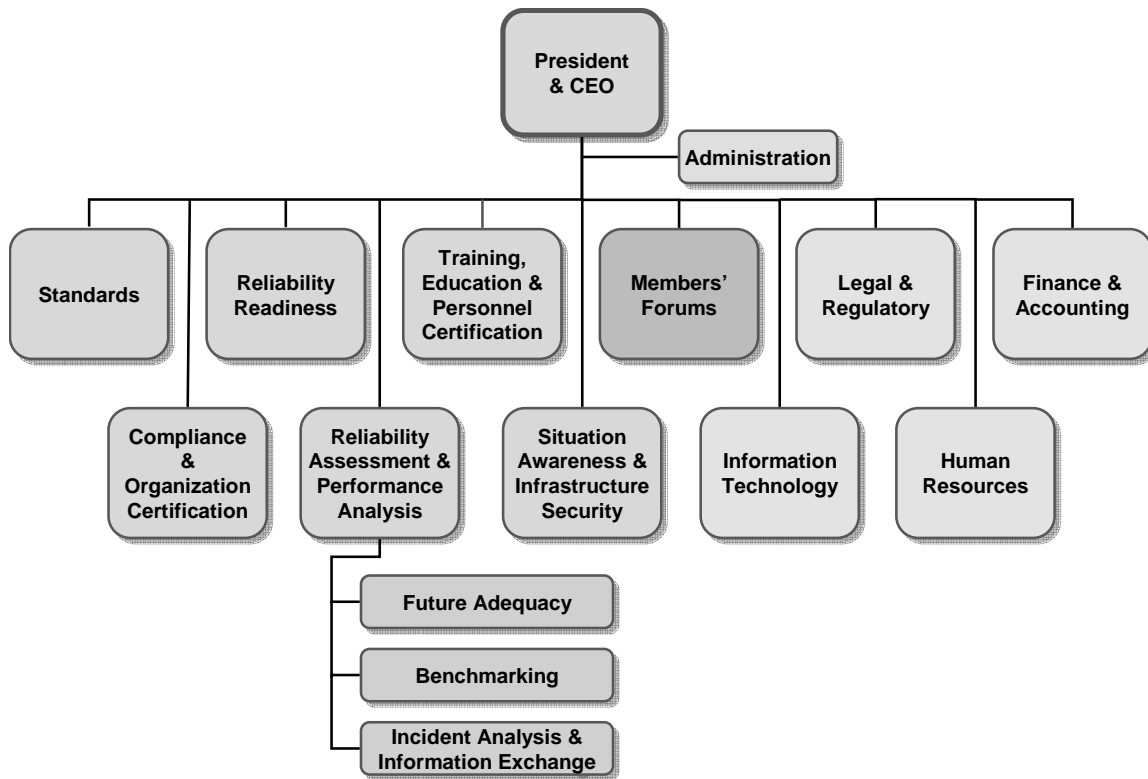
The Bylaws of NERC Corporation will specifically require that the composition of the Board include proportional representation from Canada based on its relative percentage of the North American Net Energy for Load (“NEL”). *Id.* at Article III, § 2 and 5. Since transitioning to a fully independent Board in 2001, NERC Council has used executive search firms as well as soliciting nominations from industry stakeholders to assist in identifying highly-qualified candidates for nomination for election to the Board, and NERC Corporation will continue this practice.

**2. NERC has a Senior Management Team and Professional and Technical Staff That are Highly Qualified to Operate an Effective International ERO.**

NERC has also assembled a highly qualified senior management team and professional and technical staff to lead its activities as the ERO. Presently, NERC Council has a staff of more than 50 management, professional and technical employees. In September 2005, the Board selected Richard P. Sergel as President and Chief Executive Officer to lead NERC’s transition to become the North American ERO. Mr. Sergel has more than 25 years of electric industry experience in management, system planning and forecasting, regulation and other relevant areas. He was employed with New England Electric System in positions of increasing responsibility beginning in 1979, culminating in the position of President and CEO from 1998 until its merger with National Grid Group plc in 2000. He then served as President and CEO of National Grid USA until 2004. Mr. Sergel holds a B.S. in Mathematics from Florida State University, a M.S.

in Applied Mathematics from North Carolina State University, and a M.B.A. from the University of Miami.

Under the leadership of the Board and Mr. Sergel, and in anticipation of filing its ERO Application with FERC and governmental authorities in Canada, NERC has made sweeping internal changes to enhance its organizational effectiveness and efficiency. NERC modified its internal structure, reorganized existing staff, and is proposing to increase its staff resources by 15 percent over the next two years. NERC is also exploring effective ways to open an office in Washington, D.C. and seeking to hire an additional attorney with regulatory and compliance expertise, who will be based in that Washington office. With these changes, NERC will be best positioned to take on the responsibilities of the ERO.



The revised organizational structure, which will be the organizational structure of NERC Corporation, emphasizes the principal functional responsibilities of the ERO:

- (1) Reliability Standards development and maintenance;
- (2) compliance enforcement and organization registration and certification;
- (3) reliability assessment and performance analysis;
- (4) reliability readiness audit and improvement;
- (5) situation awareness and infrastructure security; and
- (6) training, education, and personnel certification.

Further, each of the programs is led by an experienced, highly competent professional.

Following are descriptions of the programs in NERC's organizational structure and the individuals leading them.

**Standards** – This program is responsible for all aspects of NERC's Reliability Standards, including developing and maintaining Reliability Standards; the Reliability Standards development process (described in detail in Section IV.B below); and the review of proposed regional standards. This program also has primary responsibility for NERC's relationship with the NAESB, which develops business practice standards and communications protocols for electric and gas wholesale and retail market participants. Additionally, the Standards Program makes recommendations to the Training, Education, and Personnel Certification Program for the development and implementation of educational activities and programs to promote understanding and compliance with new or revised Reliability Standards. The Standards Program relies heavily on the active involvement of industry subject matter experts to both recommend and assist in the drafting of new or revised Reliability Standards.

NERC's Standards Program is led by Gerry Cauley, vice president and director of standards. He is supported by four group leaders for the functions of standards process, standards drafting, regional standards, and business practice interface. Mr. Cauley has worked with NERC since 1998, during which time he facilitated the development of NERC's ANSI-accredited standards development process and has managed numerous technical projects, including development of technical definitions and standards for interconnected operations (ancillary) services; development of the NERC System Operator Certification Program and initial testing procedures; and review of the reliability impacts of a proposed FERC rule on generator interconnection standards. In

1998-99, he coordinated all aspects of the NERC Y2k Program, supervising the Y2k reporting and readiness of 3,100 electric organizations in the United States and Canada. He also coordinated the preparation and verification of Y2k contingency plans for electric utilities in North America. Prior to joining NERC, Mr. Cauley served for six years as the program manager of the Grid Operations and Planning program at EPRI, where he facilitated the industry working group responsible for developing the Open Access Same-time Information System (“OASIS”). He has also served as a training consultant for 10 years in the areas of electric system operations, power production, substations, and distribution. Mr. Cauley has a B.S. from the U.S. Military Academy in Electrical Engineering, a M.S. from the University of Maryland in Nuclear Engineering, and a MBA from Loyola College. He is a registered Professional Engineer in Virginia.

**Compliance and Organization Registration and Certification** – This program is responsible for all aspects of NERC’s compliance enforcement and organization registration and certification activities, including the review, approval and auditing of Regional Entity compliance and enforcement programs and the oversight of delegated compliance and enforcement responsibilities (described in detail in Section IV.C below). Through this program, the ERO will monitor and enforce compliance with ERO Reliability Standards, including the imposition of penalties and sanctions on entities found in violation of Reliability Standards. It will also identify those entities responsible for complying with Reliability Standards and evaluate and certify the competency of those entities performing critical reliability functions as established in ERO Reliability Standards. This program will recommend new or improved Reliability Standards and measures to the ERO Standards Program, and the need for additional training and education activities and programs to the Training, Education, and Personnel Certification Program.

NERC’s Compliance and Organization Registration Program is led by David Hilt, vice president and director of compliance. He is supported by four group leaders for the functional areas of compliance reporting, analysis, and tracking; enforcement and mitigation; regional compliance program oversight; and regional compliance monitoring. Mr. Hilt, who joined NERC in 1999, was responsible for NERC’s technical investigation of the August 14, 2003 blackout. Prior to joining NERC, Mr. Hilt served as the Director of Operations for the Mid-America Interconnected Network, Inc. (“MAIN”) and as the reliability coordinator for that region. He was also responsible for the Information Technology function at MAIN, the centralized ATC calculation process, and operation of a wide-area network for exchanging data and information among MAIN’s members. Prior to joining MAIN, Mr. Hilt was employed by several electric utilities with responsibilities for transmission system and resource planning, substation design and construction and other engineering, design, and project management activities. He has also served as an elected Trustee for a municipal utility. Mr. Hilt holds a B.S. degree in Electrical Engineering from the University of Missouri-Rolla.

**Reliability Assessment and Performance Analysis** — This program comprises several functions critical to continuous reliability performance improvement: (1) independently assessing and reporting on the overall reliability and adequacy of the existing and

planned Bulk Power System; (2) investigating and analyzing off-normal events on the Bulk Power System to identify the root causes that may be precursors of potentially more serious events and to disseminate these findings to the industry to improve reliability performance; (3) assessing past reliability performance for lessons learned; and (4) developing reliability performance metrics and benchmarks. This program will make recommendations to the ERO Standards Program for new or revised Reliability Standards; to the Compliance and Organization Registration and Certification Program for enhanced monitoring efforts; to the Reliability Readiness Audit and Improvement Program for additional elements to include in its on-site audits; and to the Training, Education, and Personnel Certification Program for new or improved training and education programs.

David Nevius, senior vice president and director of reliability assessment and performance analysis, leads this program with support from three group leaders in the areas of reliability assessment, events analysis and information exchange, and reliability benchmarking. Since joining NERC in 1977, Mr. Nevius has been involved in all aspects of NERC's reliability assessment activities as well as NERC's efforts to transition into an industry SRO that sets and enforces compliance with Reliability Standards for the Bulk Power System. He served as the principal resource to the Electric Reliability Panel, organized in 1997 to recommend the best ways to set, oversee, and implement policies and standards that ensure the continued reliability of the interconnected North American Bulk Power System in a competitive and restructured industry. Mr. Nevius served on and facilitated a special task force to develop the NERC weighted sector voting model, which is now the basis for approving Reliability Standards. He also led the development of formal memoranda of agreement between NERC and the Nuclear Regulatory Commission and Nuclear Energy Institute to promote closer coordination and cooperation with these organizations. Prior to joining NERC in 1977, Mr. Nevius was employed by Public Service Electric and Gas Company with responsibilities for transmission expansion planning. He holds a B.S. degree in Electrical Engineering and a Masters degree in Engineering Management from Drexel University. He is a registered Professional Engineer in the state of New Jersey.

**Reliability Readiness Audit and Improvement** – This program area is responsible for implementation of NERC's readiness audit and improvement program, under which on-site audits of reliability coordinators, balancing authorities, transmission operators, and other entities with responsibilities for operating the Bulk Power System reliably will be conducted on three-year cycles (described in detail in Section IV.F below). The principal objectives of this program are to promote the highest levels of operational excellence in their reliability readiness, capabilities, and performance; identify areas for improvement; and highlight "examples of excellence" that can help audited entities and other entities improve their readiness.<sup>5</sup> Reports of audit findings are posted publicly on NERC's website, and will be provided to the appropriate governmental authorities and others as part of the ERO's overall reliability and adequacy assessment reporting program. This program will refer to the Compliance and Organization Registration and Certification Program any potential violations of Reliability Standards that it becomes aware of

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<sup>5</sup> This program is modeled on the Institute of Nuclear Power Operations Evaluation Program.

through its on-site evaluations, will report to the Standards Program any Reliability Standards deficiencies noted during the audit process, and will report to member sector forums for input of examples of excellence into best practice determination.

The Reliability Readiness Audit and Improvement Program is led by Gerard Adamski, director of reliability readiness, who is supported by seven reliability readiness auditors. Mr. Adamski joined NERC in August 2004 as its first full-time Readiness Auditor. Before joining NERC, Mr. Adamski worked at Baltimore Gas and Electric Company for 14 years in transmission operations and planning, including as the general supervisor of the transmission control center. He was involved in many PJM power pool and MAAC regional activities. Mr. Adamski also worked for PEPCO Building Services for three years, overseeing its power distribution division. Mr. Adamski earned his B.S. in Electrical Engineering degree from the University of Maryland – College Park and an M.B.A. from Loyola College in Maryland.

**Situation Awareness and Infrastructure Security** – This program maintains real-time situation awareness of conditions on the Bulk Power System and communicates information to industry and government; provides critical operational tools and other reliability support services for the benefit of reliability coordinators and other system operators; and promotes critical infrastructure protection of the Bulk Power System so as to reduce vulnerability and improve the protection of the electricity sector’s critical infrastructure. This program is also responsible for the functions of the ESISAC required by Homeland Security Presidential Declaration 7. This program provides the ERO with near real-time information needed to identify events on the Bulk Power System that will be analyzed and investigated by the Reliability Assessment and Performance Analysis Program. The infrastructure security component of this program provides input and technical expertise to the Standards Program on needed physical and cyber security standards.

This program is led by Stanley Johnson, manager of situational awareness and infrastructure security, who is supported by three group leaders for the functions of situation awareness, emergency response and reliability support services. Mr. Johnson joined NERC in 2005. Previously, he worked for Exelon and PECO for 30 years. His career included operations assignments in electric and gas distribution and electric transmission. Mr. Johnson holds an Electrical Engineering Degree from Lafayette College and a M.B.A. from Widener University. He has participated in additional management development programs at the Pennsylvania State University, the Wharton School of the University of Pennsylvania and the University of Michigan.

**Training and Education** – This program is responsible for developing and maintaining training and education programs for the purpose of establishing training requirements, developing materials and developing training activities for Bulk Power System operating personnel including system operators, operations support personnel (engineering and information technology), supervisors and managers, training personnel, and other personnel directly responsible for complying with Reliability Standards who, through their actions or inactions, may impact the real-time or day-ahead reliability of the Bulk



Power System. This program will also develop and provide appropriate training and education for industry participants and regulators affected by new or changed Reliability Standards or compliance requirements. The operator certification component of this program provides a formal, accredited basis for the certification of operators that Reliability Standards require reliability coordinators, balancing authorities and transmission operators to have on duty at all times. In addition, this program provides recommendations to the Standards Program for new or improved Reliability Standards related to operator training programs. NERC envisions that the training function and capabilities of the ERO will be complementary to its responsibilities to develop, implement and enforce compliance with Reliability Standards, and will be a critical component in fostering a culture of compliance among Bulk Power System owners, operators and users.

NERC's training function is led by Marty Sidor, director of training, education, and personnel certification, who is supported by three group leaders for the function of personnel certification, continuing education, and education and information exchange. Mr. Sidor joined NERC in 2002 to develop policies and procedures for the compliance enforcement program. He previously worked at Southwest Power Pool ("SPP") for nine years as the Manager of Training, where he developed training and certification programs for SPP members and also launched the SPP Regional Compliance program. During that period he served on the NERC Personnel Subcommittee and the Compliance Subcommittee. Mr. Sidor also worked for Northern Indiana Public Service Company for eleven years in operations as a field engineer and an electric system supervisor. He earned a B.S. Degree in Electrical Engineering Technology from Purdue University Calumet.

**3. NERC has a Demonstrated Ability to Obtain and Utilize Voluntary Participation by Technical Experts From the Electric Industry, Academia and the Public Sector to Carry Out its Responsibilities.**

Since its formation in 1968, NERC has depended upon the technical expertise of electric industry personnel to write the requirements needed to keep the Bulk Electric System reliable. Indeed, the success of NERC rested on the concept that the industry is its own best regulator, and that NERC provides the mechanism to aggregate the knowledge of the industry's best and brightest individuals into the collective decisions that become its rules. NERC Council's undertaking to become the ERO does not diminish its importance as the aggregator of the collective wisdom of the industry. Each of the programs described in Section III.C.2 above

requires the collective expertise of the industry's operators, owners and users to provide the technical foundation for success.

Participants in NERC committees and subgroups total nearly one thousand individuals, and many more provide volunteer technical support at the regional level. Individuals serve on standards drafting teams, reliability readiness audit and improvement teams, and reliability assessment and events analysis teams, as well as on the many committees and subgroups that support the NERC reliability programs. In the reliability readiness audit and improvement program alone, more than 350 industry volunteers have participated in on-site audits since the program was established in February 2004. As the ERO, NERC is committed to seek out and continue to promote this level of participation and effort by the best technical experts the industry, academia, and the public sector have to offer. NERC has the strong support of executives throughout all industry sectors to ensure that the voluntary contributions of these technical experts employed by their organizations will continue. Further, NERC's professional and technical staff is experienced in overseeing and facilitating the work of volunteer technical experts to maximize the value of their efforts in support of NERC reliability programs.

In establishing its committees and subgroups and in sponsoring sector forums, NERC adheres to, and as the ERO will continue to adhere to, two concepts:

**1. NERC will enhance reliability through the pursuit of technical excellence.** This is a goal of the ERO itself, is shared among all of its programs, and is the mission of the sector forums and committees.

**2. Committees and sector forums provide industry stakeholders with a direct portal to the ERO and its programs.** The success of the ERO programs will depend on the active and direct participation of industry stakeholders, including the ERO's members. The stakeholders are the source of the expertise in the industry and provide the force that raises the bar for enhancing reliability through technical excellence. Furthermore, the members *want* to participate in the ERO's programs, and its committees and forums provide this opportunity.

NERC and its committees and forums follow four principles:

**1. Provide expertise.** Participants from industry, academia and government provide the expertise upon which NERC’s programs depend. The success of NERC as the ERO will continue to hinge on the expertise these participants provide to the organization. Douglas Michael explains the importance that industry expertise plays in audited self-regulation:<sup>6</sup>

*“Private organizations are by their nature comprised of individuals or groups with an interest in and knowledge of the subject area around which they are organized. This makes them useful repositories of expertise to which government regulators can turn. Indeed, this is a primary motivation for government use of private standard setting organizations. Self-regulatory organizations typically begin with the development of common policies and standards, progressing to monitoring compliance with those standards, and often, but less frequently, to enforcement of those standards. It is more efficient for government to rely on that collected expertise than to reproduce it at the agency level.”*

**2. Have a clear purpose.** Committees and forums need to know who their “customers” are and what is expected of them. Each program’s goals and objectives will include the program’s expectations of NERC committees and forums.

**3. Promote efficiency.** Reducing the hierarchy in the chain of subcommittees to committees to board approval results in four important outcomes: (a) more interest from and active participation by committee members because they know they are directly responsible and accountable for the committee’s work product; (b) better candor in reports, assessments, and recommendations; (c) shorter timelines; and (d) lower staff overhead.

**4. Participate for the community good.** Committee members serve NERC’s purposes best when they understand their responsibility for making decisions for the good of the industry, and not for their own individual gains.

Currently, NERC has two types of technical committees comprising four program-specific committees and two general technical integration committees, all of which report to the NERC Board.

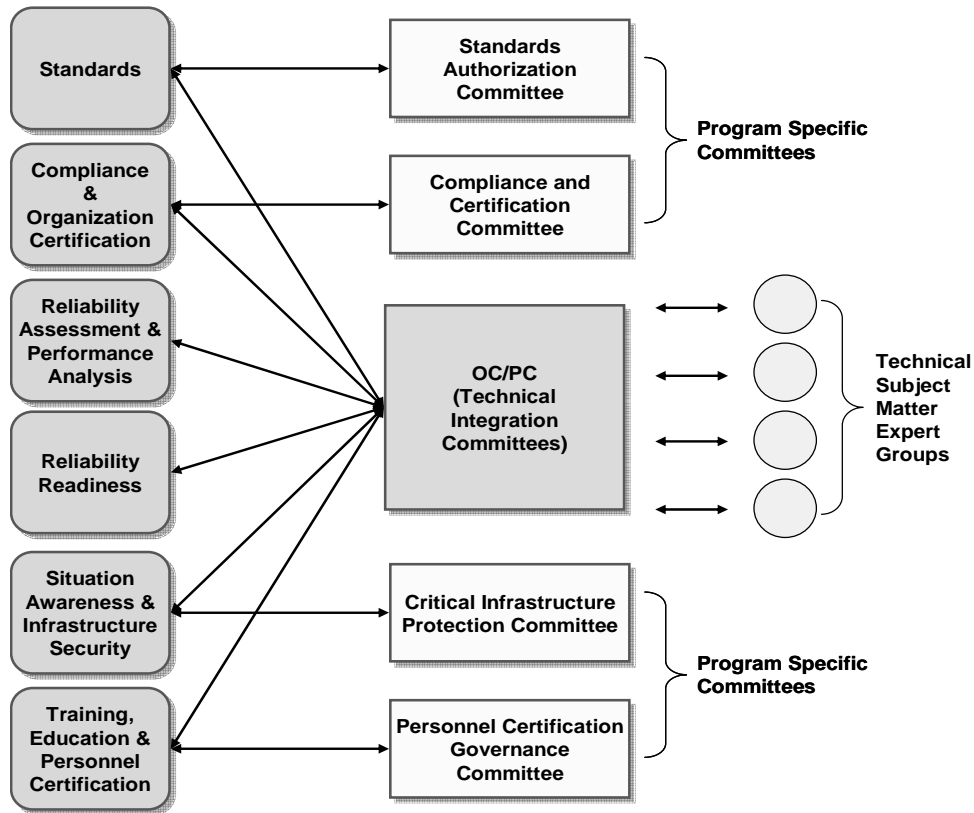
- **Standards Committee** — This program-specific committee oversees the development of NERC Reliability Standards; reviews actions to ensure the Reliability Standards development process is being followed; reviews and authorizes standard authorization requests (SARs); manages the progress of SARs and Reliability Standards development efforts; reviews and authorizes drafting new or revised Reliability Standards; makes appointments to drafting teams; and authorizes the development of supporting documents.

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<sup>6</sup> “Regulatory Agency Use of Audited Self-Regulation as a Regulatory Technique,” by Douglas C. Michael. Administrative Conference of the United States (Nov. 1993), p. 12.

- **Compliance and Certification Committee** — This program-specific committee provides stakeholder oversight and recommends policies and processes used by the NERC compliance enforcement, organization certification, and reliability readiness audit and improvement programs; provides a focal point for stakeholder input on compliance and certification issues; and provides stakeholder input to the NERC Board on compliance and certification issues.
- **Critical Infrastructure Protection Committee** — This program-specific committee, which is comprised of industry experts in the areas of cyber security, physical security, and operational security, coordinates NERC's physical and cyber security initiatives.
- **Personnel Certification Governance Committee** — This program-specific committee provides oversight of the policies and processes used to implement and maintain the integrity and independence of the NERC System Operator Certification program; and establishes policies and procedures to protect against undue influence that could compromise the integrity of the certification process.
- **Operating and Planning Committees and Subgroups** — These two committees and their subgroups provide technical advice and subject matter expert support to each of the NERC program areas, serve as forums for technical discussion and integration of the outputs of each NERC program area, and provide expert technical opinions on a variety of reliability matters to the Board. As the ERO is implemented, NERC will reevaluate the structure, role, and deliverables of the technical integration committees to ensure that the industry is able to effectively and efficiently provide its expertise in support of NERC's mission as the ERO.

A functional diagram illustrating this structure is shown below:



Don Benjamin, vice president and director of members’ forums, is leading the critical effort of overseeing these technical committees. Mr. Benjamin joined NERC in 1983 as director of operations. He was appointed vice president of operations in 2003, and vice president and director of members’ forums in 2006. Before joining the NERC staff, he was a staff engineer at the Florida Electric Power Coordinating Group (now the FRCC) for nine years. He holds B.S. and M.S. degrees in Electrical Engineering from the University of Florida. Mr. Benjamin’s entire career has centered around helping utility industry stakeholders with a broad range of expertise develop consensus to support NERC reliability activities.

In summary, NERC has the organizational structure, the senior management, the professional and technical staff, and the ability to access and utilize the technical expertise of the electric industry, academia and the public sector to be an outstanding ERO.

**D. NERC has Well-Established Working Relationships in the Electric Industry Throughout North America That are Necessary to Function as a Successful International ERO.**

To operate successfully in carrying out its responsibilities, the ERO will need to work effectively with the broad range of industry stakeholders with an interest in the Bulk Electric System. NERC has well-established working relationships with all key industry organizations, government agencies, and individual stakeholders that will enable it to function successfully as an effective ERO.

Since its creation in 1968, the members of NERC Council have been the regional reliability councils. NERC Council has well-established relationships with the regions and experience in knowing and addressing regional concerns and requirements. These relationships will facilitate NERC's execution of its responsibilities as the ERO as it enters into regional delegation agreements, reviews and approves regional Reliability Standards, oversees and audits Regional Entity compliance and enforcement programs, and reviews Regional Entity budget submissions for their delegated reliability functions.

NERC Council's current stakeholder base reflects the full range of entities interested in the reliability of the North American Bulk Power System. In 2001, NERC Council amended its Bylaws to create a Stakeholders Committee and thereby formally recognize and empower the various stakeholder interests in Bulk Power System reliability. NERC Council's Stakeholders Committee, as embodied in its Bylaws, consists of representatives of the following sectors: investor-owned utilities; state and municipal utilities; cooperative utilities; U.S. federal and

Canadian provincial utilities and federal power marketing administrations; transmission-dependant utilities; merchant electricity generators; electricity marketers; large end-use electricity customers and their representatives; small end-use electricity customers and their representatives (e.g., state consumer protection authorities and consumer counsels); independent system operators and regional transmission organizations; regional reliability organizations; and government representatives (U.S. and Canadian federal, U.S. state, and Canadian provincial). The Stakeholders Committee structure also specifically provides for Canadian representation. Under the Bylaws of NERC Corporation, the members of NERC will be the broad body of industry stakeholders that elect to join NERC. The same “sectors” used to define the current Stakeholders Committee will become the sectors of the NERC membership, from which the members of the Member Representatives Committee will be elected. Bylaws, Article II, § 4.

NERC’s relationships, however, go well beyond those established through the Stakeholders Committee that was created in 2001 and date to the creation of NERC Council. As described in Section III.C.3 above, NERC Council has long relied on voluntary participation by organizations and individuals in the electric industry, academia and government to provide the technical subject matter expertise necessary to carry out NERC’s mission of promoting and assuring the reliability and adequacy of the Bulk Power Systems of North America. Hundreds of organizations and thousands of individuals have participated in NERC Council activities since its formation in 1968. Additionally, throughout its existence NERC Council has worked continuously and cooperatively with representatives of major stakeholder groups, including the Edison Electric Institute (investor-owned utilities), the American Public Power Association (state and municipally-owned utilities), the National Rural Electric Cooperative Association (cooperative utilities), the Canadian Electricity Association (Canadian electric industry), the

Electric Power Supply Association (merchant electricity generators), the Tennessee Valley Authority, the Bonneville Power Authority, the Electricity Consumers Resource Council (large end users), the National Association of State Utility Consumer Advocates (state utility consumer advocates and consumer counsels), the National Association of Regulatory Utility Commissioners (state utility regulators), the Electric Power Research Institute (the electric industry R&D organization), and other key industry groups. Representatives of these organizations have frequently served on NERC Council committees and task forces or otherwise been involved in NERC Council's initiatives. NERC's long-standing relationships with these entities permit NERC to obtain technical expertise whenever necessary to carry out its mission of ensuring a reliable North American Bulk Power System.

Finally, NERC has well-established relationships in place with the directly relevant government agencies in the United States and Canada. In particular, NERC Council has been actively working with governmental authorities in Canada since the initial draft legislation was first introduced in the U.S. Congress to determine the requirements of these authorities that NERC must fulfill to attain recognition as the electric reliability organization under their jurisdictions in Canada.

NERC worked actively with the U.S. Department of Energy, FERC, and the Federal/Provincial/Territorial Assistant Deputy Ministers Electricity Working Group in Canada, which formed the Bilateral Electric Reliability Oversight Group ("BEROG"), to coordinate the activities of the two countries with regard to reliability. On June 30, 2005, the U.S. and Canadian federal governments announced agreement on "terms of reference" regarding international aspects of reliability and went on to develop principles to guide the establishment of a reliability organization that can function on an international basis.



Thus, NERC has long-standing comprehensive, professional working relationships with all the stakeholders in the North American Bulk Power System necessary to operate as a successful and effective ERO. Moreover, the organizational structures that NERC has in place will enable it to continue to maintain and enhance those relationships in the future.

**E. NERC has the Business Infrastructure in Place to Function as an Effective and Efficient ERO.**

NERC Council has the legal/regulatory, financial/budgeting, human resources, and information technology capabilities to function as an effective and efficient ERO. The members of the NERC Council management team leading these programs have the necessary experience and background to carry out these functions for the ERO.

**Legal/Regulatory** — David Cook is NERC’s vice president, general counsel, and director of regulatory services. Prior to joining NERC in 1999, he worked for the Commission for twenty years, the last ten as deputy general counsel. Mr. Cook was heavily involved in the Commission's restructuring efforts for both the natural gas and the electric industries. Prior to joining the Commission staff, Mr. Cook was in private legal practice, concentrating on commercial litigation, public utility law, and the regulation of securities markets. He holds degrees from Case Western Reserve University, the University of Chicago Divinity School, and the University of Chicago Law School.

**Financial** — Joseph Conner is chief financial officer and is responsible for NERC’s annual business plans and budgets. Before joining NERC, he worked for a public accounting firm and for a manufacturing firm in several financial and project management positions. He received his B.S. in Accounting / Finance from DeSales University and his M.B.A. from Philadelphia University.

**Human Resources** — Julie Morgan is the assistant secretary-treasurer of NERC as well as the manager of human resources. She is responsible for the development and administration of various human resources policies and procedures, recruitment of personnel, and staff development and training. She joined NERC in 1980. Ms. Morgan has an associate degree from Somerset County College.

**Information Technology** — Lynn Costantini is NERC’s chief information officer (“CIO”). She joined NERC in 1983. She has held a variety of positions with NERC including director of the Generating Availability Data System and director — information technology. As CIO, Ms. Costantini is responsible for

ensuring NERC's information assets and the environment in which they operate are secure. She and her team also develop and maintain systems used by the electric industry to monitor system conditions in near-real time. Ms. Costantini serves on NERC's Critical Infrastructure Protection Advisory Group and is a member of the ESISAC operations team. She represents the ESISAC on the ISAC Council and works closely with U.S. Department of Homeland Security on electricity infrastructure security matters. She has testified on the security of industrial control systems before a subcommittee of the United States House of Representatives and has published several articles on the electricity sector's security initiatives pre- and post-9/11. Ms. Costantini has worked with the industry to create *Security Guidelines for the Electricity Sector*, helped to develop NERC's Cyber Security Standard 1200, and is facilitating the industry's efforts to develop a permanent Cyber Security Standard. Ms. Costantini holds a B.A. degree in Economics and a M.B.A. from Rider University.

NERC maintains a co-located disaster recovery site for its mission and business critical information technology systems and a backup site for continuity of essential operations in the event that its primary location becomes uninhabitable.

**F. NERC has the Independence and International Scope to be an Effective ERO for North America.**

As Sections III.B through III.E above demonstrate, NERC has the necessary vision, mission, leadership, management and technical skills and expertise, experience, working relationships and infrastructure to be a successful and effective ERO. These qualifications, however, while *necessary* for an organization to be an effective ERO, are not *sufficient*. Rather, the ERO must also be *independent*. NERC's organizational and governance structure give it the necessary independence.

As described in Section III.C.1 above, NERC is led by an independent Board of Trustees comprising highly competent individuals whose backgrounds and expertise encompass a broad spectrum of relevant perspectives. NERC's Bylaws require that to be an independent Trustee, a candidate cannot be an officer or employee of NERC, a member or an officer, director or employee of a member of NERC, or an officer, director or employee of any entity that would

reasonably be perceived as having a direct financial interest in the outcome of any Board decisions and who does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a Trustee. Bylaws, Article III, §3. Similarly, NERC possesses an experienced professional staff who are dedicated to fulfilling NERC's mission to ensure the reliability of the North American Bulk Power System. As the ERO, the sole focus of NERC's Board, its senior management and its professional and technical staff will be to promote, maintain and enhance the reliability, adequacy and security of the North American Bulk Power System and to carry out the responsibilities assigned to the ERO. All employees are expected to abide by NERC's conflict of interest policy and are required to sign an annual disclosure statement.

NERC's independence will be further supported by its broad-based membership structure. As described in detail below, NERC's membership, and its Member Representatives Committee, will encompass the entire range of electric industry stakeholders, and will provide for balanced decision making, with no sector enabled to veto any action and no two sectors able to compel any action. Similarly, NERC's ANSI-accredited Reliability Standards development procedures, which includes a broad-based Registered Ballot Body (described in detail in Section IV.B.1.a below) to ballot proposed new or revised Reliability Standards, will result in balanced decision making on the development of Reliability Standards that cannot be controlled by one or two industry sectors.

Finally, NERC has the necessary international scope to fulfill the responsibility to ensure the reliability of the North American Bulk Power System. NERC Council's long history of including and working with Canadian industry participants and its established relationships with industry and government representatives throughout the United States and Canada, as well as

NERC Corporation's Board and Member Representative Committee composition requirements (described in detail in Section IV.A.2 and 3 below) – which ensure proportional Canadian representation – give it the international scope necessary to be an effective North American ERO.

In summary, NERC has the necessary independence, vision, mission, leadership, management team and professional staff, access to technical expertise, relevant experience, working relationships, infrastructure and systems, and international scope to be successful and effective as the ERO for the North American Bulk Power System. Moreover, NERC has the governance, organizational, management and technical structures, and the infrastructure, systems and procedures in place to operate in a framework of continuous reliability improvements and to ensure that it can continue to operate successfully as the ERO.

#### **IV. DESCRIPTION OF NERC'S RULES**

Section III of this Notice demonstrates that NERC is able to develop and enforce Reliability Standards that provide for an adequate level of reliability of the Bulk Power System.

Section IV of this Notice further demonstrates that NERC has established rules for independence and governance, a Reliability Standards development process, enforcement procedures, regional delegation agreements, and budgeting and funding.

Section IV also demonstrates that NERC has established rules for conducting and reporting the results of assessments of reliability and adequacy of the Bulk Power System.

Finally, Section IV includes NERC's plan for its transition to becoming the first North American ERO.

**A. NERC’s Corporate and Governance Structure Ensures its Independence From Owners, Operators and Users of the Bulk Power System.**

NERC Corporation, as a New Jersey nonprofit corporation, will have members.

Membership will be open to all persons and entities with an interest in the reliable operation of the North American Bulk Power System. NERC’s governance structure will ensure its independence from owners, operators and users of the Bulk Power System. The governance structure includes an independent Board of Trustees that will be elected by a Member Representatives Committee (“MRC”), and provides for balanced decision making.

**1. Membership**

**a. Description of Membership**

NERC will permit persons and entities to become members of the ERO, but membership will not be mandatory, and in particular will not be a requirement for participation in the development and adoption of Reliability Standards. Membership in NERC will be open to any person or entity that has an interest in the reliable operation of the North American Bulk Power System. Bylaws, Article II, § 1. There will be no fee for NERC membership. Further, membership in a regional reliability organization or Regional Entity shall not be a condition for membership in NERC. *Id.*

Any person or entity that wishes to become a member of NERC may do so by filling out and submitting the prescribed form to the secretary of NERC. From time to time as determined by the NERC Board, members will be required to renew their registration. Bylaws, Article II, § 1. As a condition of membership, each member shall agree in writing to accept the responsibility to promote, support and comply with the purposes and policies of NERC as set forth in its

Certificate of Incorporation (attached to this Notice as Exhibit A), Bylaws, Rules of Procedure and Reliability Standards. Bylaws, Article II, § 3.

As noted above, membership in NERC will not be required in order to participate in the development of, or to vote on the adoption of, Reliability Standards. Bylaws, Article IX, § 2; Rules of Procedure (“ROP”), § 304. Rather, as described in greater detail in Section IV.B.1.d below, Reliability Standards, prior to submittal to the NERC Board for approval, will be approved by those members of the registered ballot body that join a standards ballot pool. Any person or entity, regardless of membership status in NERC, may join the registered ballot body and any ballot pool to vote on a proposed Reliability Standard. ROP, § 305.1.

#### **b. Membership Sectors**

The Bylaws provide for a total of twelve sectors of the NERC membership.<sup>7</sup> Each NERC member will be assigned to one of the twelve sectors: (1) investor-owned utility; (2) state/municipal utility; (3) cooperative utility; (4) Federal or provincial utility/Federal Power Marketing Administration; (5) transmission-dependent utility; (6) merchant electricity generator; (7) electricity marketer; (8) large end-use electricity customer<sup>8</sup>; (9) small end-use electricity customer<sup>9</sup>; (10) independent system operator/regional transmission organization; (11) Regional Entity; or (12) government representative. Bylaws, Article II, § 4a. Organizations that represent the interests of entities in a sector may also become members in that sector. *Id.* A member can elect to be assigned to any sector, provided such membership is consistent with the member’s business or other activities. *Id.* at Article II, § 4b. An entity cannot be a member of more than

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<sup>7</sup> These sectors are “classes” of members for purposes of the New Jersey NonProfit Corporation Act.

<sup>8</sup> Defined by the Bylaws as 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. Bylaws, Article II, § 4a.

<sup>9</sup> Defined by the Bylaws as any person or entity that takes service below 50 kV; and any single end-use customer 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. Bylaws, Article II, §4a.

one sector. *Id.* at Article II, § 4a. As described below, the members of NERC will elect the MRC, which will elect the Board of Trustees and have other responsibilities in the governance of NERC.

## **2. Board of Trustees**

NERC Council is currently governed by an independent board, which will continue to operate as the board of NERC Corporation if it becomes the ERO. As set forth in Article III of NERC's Bylaws, the Board will manage the business and affairs of NERC. In particular, the Board will: (1) approve NERC's budgets and business plans; (2) elect and appoint NERC's officers, including its president, (3) approve all Reliability Standards, (4) approve all delegation agreements with Regional Entities; (5) approve all Rules of Procedure and amendments thereto (with the exception of the certification eligibility requirements and other rules and processes for the System Operator Certification Program); and (6) approve (along with the MRC) amendments to the Bylaws.

NERC's Board will consist of eleven trustees. Bylaws, Article III, § 1. The Bylaws provide for the Board to consist of a number of trustees from the U.S. and a number of trustees from Canada based on each country's percentage of the total net energy for load (NEL) of the United States and Canada.<sup>10</sup> *Id.* at Article III, § 2. When NERC obtains appropriate recognition as the ERO for Mexico, this Board composition formula will be revised to provide for appropriate, proportional Mexican representation on the Board. The Board will also use the NEL methodology to ensure equitable numbers of members are appointed to committees required by the Bylaws and any other committees that may be formed. *Id.* at Article VII, § 1. These

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<sup>10</sup> NEL is defined as 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. Bylaws, Article I, § 1(f); ROP at § 202(15). Based on data for a recent year on the NEL of the U.S. and Canada, this Board composition requirement results in two Canadian members on the eleven member Board.

provisions require that country representation be in rough proportion to the NEL for each participating country.

Under NERC's Bylaws, ten of the trustees are independent trustees elected by the MRC, which will consist of representatives of the NERC membership sectors. (The composition and election of the MRC is described in the next section of this Notice.) Bylaws, Article III, § 1. The independent trustees may not be officers or employees of NERC, members of NERC, officers, directors or employees of members of NERC, or officers, directors, or employees of any entity that would be reasonably perceived as having a direct financial interest in the outcome of Board decisions. *Id.* at Article III, § 3. The remaining trustee, known as the management trustee, is the President of NERC elected by the Board. Each trustee, including the management trustee, will have one vote on any matter brought before the Board for a vote.

The independent trustees will be elected to staggered three-year terms. Each year, the Board will appoint a nominating committee to nominate candidates for election to succeed the independent trustees whose terms expire that year and to serve the remainder of the term of any independent trustee who ceased to serve subsequent to the last annual election of trustees. *Id.* at Article III, § 5. The nominating committee will consist of independent trustees whose terms do not expire during the current year and such other persons as the Board shall specify, including at least three members of the MRC. *Id.* In nominating candidates for the Board, the nominating committee will be required to endeavor to be consistent with the objectives that the Board reflect expertise in the areas of technical electric operations and reliability, legal, market, financial and regulatory matters, and regional system operation issues, and reflect geographic diversity. *Id.*

The MRC will elect trustees to fill the open Board positions from the nominees proposed by the nominating committee. *Id.* at Article III, § 6. An affirmative vote of two-thirds of the



MRC is required to elect an independent trustee. *Id.* This requirement ensures that no two sectors can control election of independent trustees and that no one sector can block the election of an independent trustee to the Board.

The Board will elect a chairman and a vice chairman, as well as the president of NERC, and will appoint, on the recommendation of the president, a secretary, a treasurer, an assistant secretary-treasurer and such other officers of NERC as the Board deems necessary. *Id.* at Article VI, § 1.

The Board may also by resolution create standing committees of NERC and appoint other committees as the Board deems necessary to carry out the purposes of NERC. *Id.* at Article VII, § 1. All appointments to committees shall provide for the opportunity for participation by members from the United States and Canada in approximate proportion to each country's total NEL. *Id.*

### **3. Member Representatives Committee**

Under NERC's Bylaws, the MRC effectively replaces the current NERC Stakeholders Committee. The MRC's responsibilities will be to: (1) elect the independent trustees to the NERC Board; (2) vote on amendments to the Bylaws,<sup>11</sup> and (3) provide advice and recommendations to the Board with respect to the development of annual budgets, business plans and funding mechanisms and other matters related to the operations of NERC. Bylaws, Article VIII, § 1. These provisions help to ensure member representation in the selection of directors and a role for the members (through the MRC) in the primary governance functions of the ERO.

The MRC will consist of (1) two representatives from each membership sector except the government representative sector and regional reliability organization sector; (2) one

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<sup>11</sup> The Board also must ordinarily approve amendments to the Bylaws. Bylaws, Article XIV.

representative from each regional reliability organization; (3) the chairman and vice chairman of the MRC; (4) any additional Canadian representatives required by the Bylaws; and (5) two representatives of the U.S. federal government, one representative of the Canadian federal government, two representatives of state governments, and one representative of a provincial government. All of the representatives in category (5) will be non-voting members except the two state government representatives. Bylaws, Article VIII, § 2. (See Table 1 below.) No member of the Board of Trustees can be a member of the MRC. *Id.* Each member of the MRC will serve a two-year term, with one-half of the members' terms expiring each year. There are no term limits for MRC members. *Id.*

#### Member Representatives Committee Model

<b>Officers<sup>1</sup></b>	
Chairman	
Vice Chairman	
Secretary (Non-voting)	
<b>Industry Sectors<sup>2</sup></b>	<b>Regional Reliability Organizations<sup>4</sup></b>
Investor-Owned Utility (2)	ERCOT (1)
State/Municipal Utility (2)	FRCC (1)
Cooperative Utility (2)	MRO (1)
Federal (2)	NPCC (1)
Merchant Electricity Generator (2)	RFC (1)
Electricity Marketer (2)	SERC (1)
Large End-Use Electricity Customer (2)	SPP (1)
Small End-Use Electricity Customer (2)	WECC (1)
Transmission-Dependent Utility (2)	
ISO/RTO (2)	<b>Government Representatives<sup>5</sup></b>
	U.S. Federal (Non-voting) (2)
<b>Canada<sup>3</sup></b>	U.S. Eastern/Texas Interconnection (1)
Up to 4 additional members	U.S. Western Interconnection (1)
	Canada Provincial (Non-voting) (1)
	Canada Federal (Non-voting) (1)

1. Officers are elected by the MRC. Officers are voting members.
2. Each defined industry sector elects two voting members per sector.
3. Provision is made to elect additional Canadian members to the committee as needed to bring the total number of Canadian voting members to four.

4. Members of each regional reliability organization elect one voting member of the committee.
5. Government representatives may be elected or appointed. Government agencies that regulate the ERO have non-voting memberships.

The members of the MRC from each sector will be elected by the members of that sector from nominees who must be members of NERC or officers, executive level employees or agents of a member of NERC in that sector, except that the representative of each regional reliability organization shall be elected by the members of that regional reliability organization. *Id.* at Article VIII, Section 3. Consistent with the principle of balanced decision making, no more than one nominee of a member can stand for election in any single sector. *Id.* In the election of the MRC, each member in a sector shall have one vote. *Id.* at Article VIII, Section 6. Because the MRC is elected by the NERC members and not appointed by the board, the MRC is not considered a standing committee, but it is authorized to provide its advice and recommendations directly to the board.

The Bylaws contain provisions to ensure that the MRC includes a number of Canadian voting representatives based on the Canadian percentage of the total U.S. and Canadian NEL. If the selection of MRC members does not result in a number of Canadian members of the MRC as required by this formula, then the Canadian candidate(s) who received the highest vote total but were not elected will be added to the MRC until the requisite number of Canadian voting representatives are included on the MRC, provided that in fulfilling this requirement no more than two additional Canadian voting representatives may be selected from a sector. These Canadian representatives will be representatives of the sector for which they stood election. *Id.* at Article VIII, § 4. Based on recent data on the NEL of the United States and Canada, these

provisions ensure that there will be at least four Canadian voting members on the MRC.<sup>12</sup>

The MRC will select a chairman and vice-chairman. The chairman and vice-chairman may not be members of the same membership sector. Upon assuming their positions, the chairman and vice-chairman shall cease to act as representatives of the sectors that elected them to the MRC and shall be responsible for acting in the best interests of all the MRC members. *Id.* at Article VIII, § 5.

The quorum necessary for transaction of business at meetings of the MRC will be two-thirds of the voting members of the MRC. Each voting member of the MRC will have one vote on any matter that comes before the MRC. Actions shall be approved by majority vote of the MRC representatives present and voting at any meeting at which a quorum is present. *Id.* at Article VIII, § 9. This ensures that no two stakeholder sectors are able to control the vote on any matter and that no single sector should be able to defeat a matter.

**B. NERC's Standards Development Process is Technically Sound and Permits the Development of Fair and Balanced Reliability Standards.**

NERC is committed to developing technically sound, fair and balanced Reliability Standards to ensure the reliability of the Bulk Power System in North America. NERC has developed a comprehensive process to ensure the development of such Reliability Standards.

**1. Reliability Standards Development by the ERO and Regional Entities**

NERC will develop Reliability Standards in accordance with Section 300 of its Rules of Procedure and the NERC Reliability Standards Development Procedures (“Development Procedures”), which are incorporated into the ROP as Appendix 1. On March 24, 2003, the ANSI Executive Standards Council notified NERC that it had approved the accreditation of NERC using its own operating procedures for documenting consensus. NERC will submit

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<sup>12</sup> When NERC receives recognition from appropriate Mexican authorities as the ERO for Mexico, this provision will be expanded to provide for adequate representation of Mexican interests on the MRC.

changes to its Reliability Standards Development Procedures to ANSI as needed to maintain its ANSI accreditation. ROP at § 317.

As described in detail below, NERC's ANSI-accredited Reliability Standards Development Procedure will help to ensure NERC's success as the ERO.

In response to the blackout of August 2003, NERC Council transformed its existing operating and planning standards into Version 0 Reliability Standards, which became effective on April 1, 2005. NERC Council has continued to improve and expand these Reliability Standards through its open Reliability Standards development process. In a companion filing, NERC is filing notice of its existing Reliability Standards.

**a. Registered Ballot Body**

Proposed Reliability Standards will be approved by the members of the registered ballot body ("RBB") that join a standard ballot pool prior to submittal to the NERC Board and the appropriate governmental authorities for approval. As discussed above, any person or entity with a legitimate interest in the reliability of the Bulk Power System may join the RBB and a ballot pool, whether or not a member of NERC. ROP at § 305.1. The RBB consists of multiple sectors. A corporation or other organization may join each sector of the RBB for which it qualifies, provided that the membership in each sector constitutes a separate membership represented by a different representative. *Id.* at § 305.3.1. The sectors of the RBB are: (1) Transmission Owners, (2) RTOs, ISOs and Regional Entities; (3) Load-Serving Entities; (4) Transmission Dependent Utilities; (5) Electric Generators; (6) Electricity Brokers, Aggregators and Marketers; (7) Large Electricity End Users; (8) Small Electricity Users, and (9) Federal, State and Provincial Regulators or other Government Entities.<sup>13</sup> NERC will review all applications for joining the RBB and will make a determination whether the applicant's self-

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<sup>13</sup> Sector 9 does not include federal power marketing administrations or the Tennessee Valley Authority.

selection of a sector satisfies at least one of the criteria to belong to that sector. *Id.* at § 305.6.

The entity will then become eligible to participate as a voting member of that sector of the RBB and join any SBP. *Id.* The RBB process ensures fair representation of all views in the development and approval of a Reliability Standard.

**b. Standards Committee**

The Standards Committee provides oversight of the Reliability Standards development process to ensure stakeholder interests are fairly represented. ROP at § 306. The Standards Committee is a representative committee consisting of representatives of two members of each sector of the RBB. *Id.* at § 306.1. Standards Committee members are elected for staggered two-year terms by their respective stakeholders. *Id.* at § 306.2. Consistent with the principle of inclusiveness, if any regular election of Standards Committee members does not result in at least two Canadian members, the Canadian nominees who were not elected and received the next highest percentage of votes within their respective sector will be designated as additional members of the Standards Committee, as needed to achieve two Canadian members. *Id.* at § 305.3.1. The Standards Committee's diverse membership will ensure a balance of interests both by sector and by country.

**c. Standards Process Manager**

NERC will assign a standards process manager to administer the development of Reliability Standards. The standards process manager will be responsible for ensuring that the development and revision of Reliability Standards are in accordance with the Reliability Standards Development Procedure. The standards process manager works to ensure the integrity of the process and consistency of quality and completeness of the Reliability Standards, and facilitates all steps in the process. ROP at § 307.

#### **d. Reliability Standards Development Process**

NERC's Reliability Standards Development Procedure provides for due process, openness and a balance of interests. This process draws upon the substantial technical expertise of both NERC and the industry. The result of this intensive process will be technically sound, clear and unambiguous Reliability Standards designed to achieve specific reliability goals.

The first step in the Reliability Standards Development Procedure is the submission by a person or entity of a request for a Reliability Standard, modification of a Reliability Standard or withdrawal of a Reliability Standard using a Standard Authorization Request ("SAR"). Any member or committee of NERC, any member or committee of a Regional Entity, or any person or entity directly and materially affected by the reliability of the North American Bulk Power System, will be allowed to request that a Reliability Standard be developed, modified, or withdrawn. ROP at § 308.1. This process is consistent with ANSI requirements. The SAR will be sent to the standards process manager who will then forward it to the Standards Committee. Development Procedures at Step 1.

NERC will then publicly notice the SAR and request public comment for a least a 30-day period. Development Procedures at Step 2. The Standards Committee will authorize development of the proposed Reliability Standard if there is sufficient stakeholder consensus on the scope and justification of the Reliability Standard. ROP at § 308.2; Development Procedures at Step 3. The Standards Committee will then appoint a Reliability Standards drafting team that has the necessary technical expertise, competencies, and diversity of views that are necessary to develop the Reliability Standard. Typically, the Standards Committee oversees a public nominations process to populate the Reliability Standard drafting team. Development Procedures at Step 4. The Reliability Standards drafting team will draft Reliability Standards

based on sound engineering and technical criteria and on actual data and lessons learned from operating incidents. *Id.* The Standards Committee will also ensure that there is a diversity of views in the Reliability Standards development effort. Openness will be fostered as a result of all meetings of the drafting team being open and noticed to the public. ROP at § 308.4.

After the Reliability Standard has been drafted, the standards process manager will review the Reliability Standard for consistency of quality and completeness, and to ensure the draft Reliability Standard is within the scope and purpose identified in the SAR. Development Procedures at Step 5. The draft Reliability Standard will then be posted for further public comment for at least 45 days. Development Procedures at Step 6. After consideration of comments received, the Reliability Standards drafting team may recommend to the Standards Committee that the draft Reliability Standard be field tested. Development Procedures at Step 7. Field testing, when practical, will provide actual data that the drafting team can utilize in Reliability Standards development. However, not all Reliability Standards will require field testing. The drafting team may also decide, on the basis of the comments, to revise the draft and post it for additional comments. Development Procedures at Step 8. Once the drafting team determines that the draft Reliability Standard is ready for balloting, the drafting team will submit the draft Reliability Standard to the Standards Committee with a request to proceed to balloting. *Id.* The Standards Committee will review the draft Reliability Standard to ensure it is consistent with the SAR and is compatible with existing Reliability Standards. *Id.* The Standards Committee will remand the draft Reliability Standard to the Reliability Standards drafting team if revisions are needed. *Id.* If the drafting team determines that there is inconsistent consensus to ballot the Reliability Standard and further work is unlikely to achieve consensus, it may recommend to the Standards Committee that the draft Reliability Standard be terminated and the



SAR withdrawn. *Id.* The Standards Committee will consider this recommendation and may terminate the Reliability Standards drafting and accept withdrawal of the SAR. If the Standards Committee disagrees, it may direct other actions, such as appointing a new drafting team. *Id.*

The standards process manager will establish a ballot pool for the proposed Reliability Standard at least 30 days prior to the start of the balloting. Development Procedure at Step 9. The standards process manager will send a notice to every member of the RBB in order to establish a ballot pool to vote on the proposed Reliability Standard. *Id.* Any member of the RBB may elect to join the ballot pool for the proposed Reliability Standard. Approval of a new Reliability Standard or revision to an existing Reliability Standard requires a quorum of at least 75 percent of the members of the ballot pool and a two-thirds majority of the weighted sector votes in the affirmative. *Id.* The use of a weighted sector voting calculation ensures that there is a balance of interests in the development and approval of Reliability Standards

If there are any negative votes in the first ballot with reasons specified, the ballot pool will again be presented the proposed Reliability Standard along with the reasons for the negative votes. *Id.* All members of the ballot pool will be given a chance to reconsider and change their vote. *Id.* If a second ballot is conducted, its results will determine the status of the Reliability Standard, regardless of the outcome of the first ballot.

New Reliability Standards or revisions to Reliability Standards approved by the ballot pool will be submitted to the Board of Trustees for approval. Development Procedures at Step 10. The board shall consider the results of the balloting and dissenting opinions, as well as any advice offered by the Member Representatives Committee. *Id.* The Board must adopt or reject a proposed Reliability Standard and may not modify a proposed Reliability Standard. *Id.* If the

Board chooses not to adopt a proposed Reliability Standard, it must provide its reasons for not doing so. *Id.*

NERC's current Reliability Standards Development Procedure allows a standard to be developed and approved in as little as four months; however, more complex standards requiring development of new technical concepts, methods and measures can take 12 to 15 months.

After a proposed Reliability Standard receives Board approval, NERC shall submit the proposed Reliability Standard to the applicable governmental authorities. Development Procedures at Step 11.

**e. Appeals Process for Reliability Standards Development**

Due process in NERC's Reliability Standards development process is further guaranteed by the presence of a well-defined appeals process. Persons who have been or will be directly and materially affected by any action or inaction related to the development, approval, revision, reaffirmation or withdrawal of a Reliability Standard shall have the right to appeal to the ERO. Development Procedures at pages 27-28. Appeals shall be initiated within 30 days of the action complained of. *Id.* The final decision on any appeal shall be documented and made public. *Id.*

The appeals process has two levels. Level 1 entails the appellant submitting a complaint in writing to the standards process manager describing the action complained of. *Id.* The standards process manager, assisted by any necessary staff and committee resources, will prepare a written response as soon as practical and in any event not more than 45 days after receipt of the complaint. *Id.* If the appellant remains unsatisfied, the standards process manager shall convene a Level 2 Appeals Panel. This panel shall consist of five members appointed by the Board. *Id.* The panel may find for the appellant and remand the issue to the Standards Committee for

action. *Id.* However, the panel may not revise, approve, disapprove, or adopt a Reliability Standard. *Id.*

**f. Urgently Needed Reliability Standards**

Urgent action may be appropriate when a delay in implementing the proposed Reliability Standard or revision can materially impact reliability of the Bulk Power System. Development Procedures at page 25. NERC's process for developing an urgently needed Reliability Standard will begin with a SAR that includes justification for urgent action along with a draft of the proposed Reliability Standard. *Id.* The standards process manager will then submit this request to the Standards Committee, which has the authority to designate a proposed Reliability Standard as requiring urgent action. *Id.* If the proposed Reliability Standard is designated for urgent action, the standards process manager will immediately seek participants for the ballot pool and post the draft. *Id.* This posting requires a minimum of 30 days and uses the same voting procedure as outlined above. *Id.* Like all Reliability Standards, an urgently-needed Reliability Standard must be adopted by the Board before being submitted to the appropriate governmental authority. This urgent action process allows a Reliability Standard to be approved by stakeholders and the NERC board within 60 days of receiving a proposal.

Any Reliability Standard approved as urgent is interim and will have a termination date that does not exceed one year from the approval date. This will prevent urgent Reliability Standards from becoming *de facto* permanent Reliability Standards. If necessary, urgent actions can be renewed again using the urgent process. However, if a Reliability Standard is intended to become permanent, the full development process must be used. Development Procedures at p. 25.

**g. Criteria for Reliability Standards**

NERC's criteria for Reliability Standards, as specified in its Rules of Procedure, include: identification of the functional classes of entities responsible for complying with the Reliability Standard; a clearly stated purpose that describes the reliability objective(s) to be achieved by the Reliability Standard; an objectively-measurable performance requirement or outcome to be achieved by the responsible entities that will provide for a reliable Bulk Power System; clear and unambiguous language that does not require subjective interpretation; completeness within the Reliability Standard; a technical basis in sound engineering and operating judgment, analysis or experience; requirements that can be practically implemented by the responsible entities; and use of standard terms and definitions. ROP at § 302. The standards process manager follows the development of a Reliability Standard from request to ballot, continuously monitoring the Reliability Standard's conformance to these criteria. NERC uses comments from stakeholders during the development of the standard to verify that the Reliability Standard meets the ten criteria for technical excellence. The results are reviewed by the Standards Committee prior to the Reliability Standard being sent to the Board for approval.

## **2. Regional Differences in Reliability Standards**

NERC will strive to have all Reliability Standards apply throughout the interconnected North American Bulk Power System to the maximum extent achievable. Notwithstanding this goal, exceptions from continent-wide uniformity in a Reliability Standard may be warranted.

NERC defines a regional difference as an aspect of a NERC Reliability Standard that applies only within a given region or regions. Development Procedures at page 27. To the maximum extent possible, regional differences will be addressed through the NERC Reliability Standards development process and incorporated into and approved as part of the NERC Reliability Standards. *Id.* This will occur in all cases if a requirement would otherwise be

inconsistent with or less stringent than a NERC Reliability Standard. This will ensure that a regional difference is not less stringent than the continent-wide Reliability Standard.

NERC proposes that Regional Entities may develop separate regional standards through their own processes. Development Procedures at page 26. Regional standards that exist independently from NERC Reliability Standards may not be inconsistent with or less stringent than NERC Reliability Standards. *Id.* Interconnection-wide regional standards are presumed to be valid, with a rebuttable presumption for those who wish to challenge them. *Id.* The rebuttable presumption can be overcome if the proposed regional standard or difference (1) was not developed in a fair and open process that provides an opportunity for all interested parties to participate, i.e., due process; (2) would have a significant adverse impact on reliability or commerce in other interconnections; (3) would be likely to cause a serious and substantial threat to public health, safety, welfare or national security; or (4) would create a serious and substantial burden on competitive markets within the interconnection that is not necessary for reliability.<sup>14</sup> Development Procedures at page 27.

NERC will publicly notice and request comments on a proposed interconnection-wide regional Reliability Standard, allowing a minimum of 45 days for comments. ROP at § 313.3.2. The Regional Entity shall have an opportunity to resolve any objections identified in the comments and may choose to withdraw the request, revise the proposed Reliability Standard and request another posting for comment, or submit the proposed Reliability Standard along with its consideration of any comments received, for approval by NERC. *Id.*

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<sup>14</sup> Regional Standards that are not applied on an interconnection-wide basis are not presumed to be valid but may be demonstrated to be valid. These types of regional standards or differences will be adopted only if the proponent shows that the first three factors listed above for the interconnection-wide standards are not present and that there is a justifiable difference between regions or sub-regions within the Regional Entity's geographic area. Development Procedures at page 27.

NERC will then determine if the proposed interconnection-wide regional Reliability Standard was developed in accordance with all applicable procedural requirements and whether the Regional Entity has considered and resolved stakeholder objections that could serve as a basis for rebutting the presumption of the validity of the regional Reliability Standard. ROP at § 313.3.3. Finally, the proposed interconnection-wide regional Reliability Standard will be submitted to the NERC Board for approval and, if approved by the Board, will be filed with the appropriate governmental authorities. ROP at § 313.3.4.

### **3. Remand of a Reliability Standard**

The issues surrounding remand of a Reliability Standard will require that governmental authorities on both sides of the border engage in consultation and collaboration, both with NERC and with each other. To the maximum extent possible, the prospect of a Reliability Standard being approved in one jurisdiction and yet rejected and remanded in another, or having inconsistent Reliability Standards in force in different jurisdictions, must be avoided. At a minimum, such a situation would foster confusion among industry participants on both sides of the border. It may also result in unfairness. For those Reliability Standards where the physics of the integrated grid dictate an absolute need for uniformity, nothing short of uniformity will work. The situation is compounded because in three Canadian jurisdictions (Alberta, Ontario, and New Brunswick), NERC reliability standards become legally binding by operation of law once the NERC board approves them.

NERC does not believe any kind of joint decision-making arrangement is possible in this situation, given the differing authorities of the various jurisdictions. NERC believes the key to dealing with remand of a standard lies in communication at several levels. First and foremost, communication must occur during the Reliability Standards development process itself. That is

the best way to assure that issues can be identified and addressed early in the process, at a point when they are relatively easier to deal with. Governmental authorities can help bring this about by strongly encouraging all those within their jurisdiction to actively participate in the NERC Reliability Standards development process. Participation is open, and no barriers exist to those who wish to participate. If governmental authorities have an issue with a Reliability Standard, they should explore ways to have that issue raised while the Reliability Standards is under development.

Second, NERC must communicate with governmental authorities about the various milestones in the development of a Reliability Standard, so that no one is surprised about the pace of development or content of a proposed Reliability Standard.

Third, NERC must communicate as it files a Reliability Standard in each jurisdiction concurrently, making sure that each jurisdiction has all the information it needs to evaluate the proposed Reliability Standard.

Fourth, affected governmental authorities must have mechanisms in place to communicate with each other promptly, so that all learn if any governmental authority has an issue with a particular Reliability Standard. Ideally, this should occur before any governmental authority has acted to remand a standard that has been developed and approved by the ERO. To facilitate that communication, governmental authorities could establish procedures under which they will not take any action (other than seeking public comment) for a certain period (perhaps 60 days). The procedures could provide that if any governmental authority raises an issue within the 60-day period, none of the governmental authorities will take action for another 60 days. This would allow time to work out a possible solution. Rule 309.2 of NERC's Rules set out in

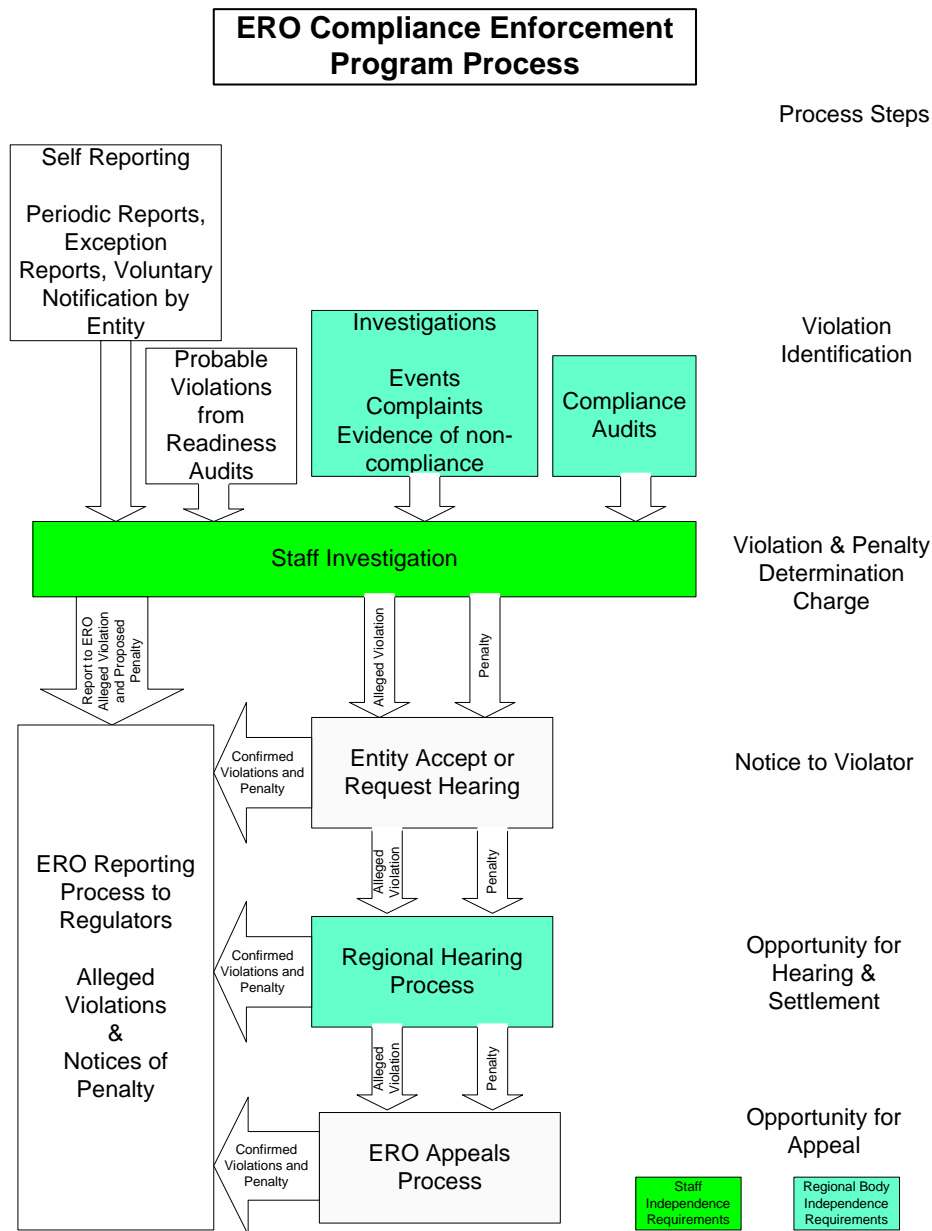
Exhibit C commits NERC to prompt notification of all governmental authorities in the event of a remand.

NERC recommends that all relevant governmental authorities enter into a memorandum of understanding that embodies this approach. Such a memorandum of understanding would let NERC and all interested persons know what to expect regarding remands of Reliability Standards, and would provide a principled way for the multiple jurisdictions to address the very real need for a coordinated approach to approving and/or remanding Reliability Standards. NERC offers to assist in any way it can in the development of such a memorandum of understanding. Without explicit coordination among regulatory officials of all affected jurisdictions, a proposed Reliability Standard could be accepted in one jurisdiction but remanded in another, which could lead to the untenable situation of having different Reliability Standards apply to different parts of the same grid. The interconnected grid cannot be operated or used in accordance with multiple, inconsistent Reliability Standards.

**C. NERC has Developed Fair and Impartial Enforcement Procedures That Will Utilize the Experience of the Regional Entities.**

The NERC Compliance Enforcement Program process is depicted in the following diagram and described in the text below.





## 1. Compliance Registry

The ERO compliance program must begin with a clear understanding of which entities are subject to the reliability standards. NERC intends to achieve that objective by establishing a compliance registry for all those who are subject to the reliability standards. The existence of such a registry provides clear, unambiguous, and timely notice to all concerned of the requirement to comply. Such a registry facilitates on-going communication among NERC,

regional entities, and entities subject to the standards. In addition, such a registry facilitates audits of such entities, facilitates the provision of training for such entities, and facilitates data gathering from such entities. NERC also believes it will be useful in the development of additional standards to know to whom the standards apply. NERC expects the registry to be dynamic over time as bulk power system owners, operators, and users change, but at any given time the registry will provide a precise list of those who are subject to the standards.

NERC, working with the regional entities, will establish a compliance registry of those entities that are subject to the reliability standards. Each entity will receive notice of the determination from NERC. Each entity will have the opportunity to challenge that action, including seeking review of the decision by the appropriate governmental authority. In similar fashion, if anyone believes that an entity has been inappropriately excluded from the registry, they will have the opportunity to nominate that entity for inclusion, again with the opportunity available to challenge the decision NERC makes on the matter.

In establishing the compliance registry and revising it over time, NERC and the regional entities will start with the following: “All users, owners, and operators of the bulk-power system shall comply with reliability standards.” NERC and the regional entities will then use the following criteria to make an initial determination. Owners and operators of bulk power system facilities will generally be included on the registry. NERC will look to the definition of “bulk electric system” from NERC’s Glossary of Terms to set the parameters for the bulk power system. That means the electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher, would be considered to be part of the bulk power system. Radial transmission facilities

serving only load with one transmission source, without more, would not be considered to be in the bulk power system.

A customer that receives electric service at retail and does not otherwise directly receive, sell, purchase, or transmit power over the bulk-power system or own, operate or maintain, control or operate facilities or systems that are part of the bulk-power system would not in general be considered to be a user of the bulk-power system. An entity directly connected to the bulk-power system selling, purchasing, or transmitting electric energy over the bulk-power system would be considered to be a user of the bulk-power system, unless the entity had no material impact on the bulk power system. Other factors such as the consequences of an entity's actions or inactions on the reliability of the bulk power system (e.g., being part of a special protection system) may also be relevant in particular cases. The above considerations should result in an appropriate level of granularity in identifying those users that have a material impact on the reliability of the bulk power system. In all cases, the entity would know in advance of its inclusion on the registry and have the opportunity to challenge that decision.

NERC expects to produce the appropriate list of entities for which compliance with the reliability standards must be mandatory if we are to assure the continued reliability of the bulk power system. This approach also provides the flexibility to modify the registry as necessary to respond to changing circumstances over time.

## **2. Compliance Monitoring Process**

NERC has developed a program to actively monitor compliance with its Reliability Standards. NERC's Compliance Enforcement Program allows for self-reporting of violations by those responsible for meeting the Reliability Standards, backed by proactive random audits and

spot-checks. The program also includes proactive compliance audits that are conducted on a periodic basis as discussed below.

NERC expects that all Reliability Standards will be followed at all times. Any violations must be reported to NERC or the appropriate Regional Entity with delegated compliance monitoring authority. Additionally, NERC will establish a set of key Reliability Standard requirements to be actively monitored for compliance annually. These requirements will be identified based on reliability performance and the need to focus on key requirements on a periodic basis. With these Reliability Standard requirements identified, specific reporting requirements will be established and communicated to the Regional Entities and those responsible to comply.

Regional Entities will be required to conduct compliance audits of all entities obligated to comply with Reliability Standards. ROP at § 403.14. For entities with primary reliability responsibilities including reliability coordinators, transmission operators, and balancing authorities, these audits will occur at least every three years at the operating entity's site. For others, the audits will occur on a schedule based on the final number of entities identified through the registration process. These compliance audits will determine whether the audited entity is in compliance with all applicable Reliability Standards, and the results of all such audits will be made public following completion of all necessary due process requirements. *Id.* at § 403.16. The Regional Entity may, if necessary, call upon independent technical experts when conducting compliance audits. *Id.* at § 403.12.3. NERC staff may, at NERC's discretion, participate in the regional compliance audit process and may initiate audits. *Id.* at § 403.15. All personnel shall keep information obtained through the compliance audit process confidential. *Id.* at §§ 402.9 and 403.12.4.

### **3. Proposed Penalties, Sanctions and Remedial Actions**

NERC's penalty guidelines are found in its *ERO Sanction Guidelines* ("Sanction Guidelines"). ROP Appendix 4. The Sanction Guidelines are provided for informational purposes.

#### **D. ERO Relationship with Regional Reliability Councils**

NERC has a strong relationship with the regional reliability councils that have been developed over several decades. This strong relationship will enable NERC to leverage resources and extend its reach in becoming a strong and effective ERO. NERC provides strong oversight of the regions to ensure consistency of ERO-delegated functions across North America, where applicable, while allowing an appropriate degree of flexibility for regional differences.

#### **E. NERC has Developed a Pro Forma Regional Delegation Agreement**

The pro forma delegation agreement that is required by FERC in its rules is provided as Exhibit D. The pro forma regional delegation agreement defines the responsibilities of the ERO and regional entities with regard to delegated functions in the United States, and was included in NERC's Application for Certification with FERC. This Exhibit is provided in the Notice for informational purposes only.

#### **F. NERC has an Established Reliability Readiness Audit and Improvement Program That Utilizes the Expertise of Industry Volunteers.**

NERC has developed a Reliability Readiness Audit and Improvement Program designed to assess the readiness of operators of the Bulk Power System, specifically, reliability coordinators, balancing authorities, transmission operators, and other entities that provide crucial support to these entities, to execute their designated reliability responsibilities. ROP § 701.

These reliability readiness audits promote excellence in operations by identifying opportunities for improvement and examples of excellence that help the audited entity and other entities improve their readiness. The readiness audits are conducted on a three-year cycle. The audits are conducted by audit teams comprising industry volunteers with appropriate technical expertise and led by a member of NERC's technical staff. *Id.* at §§ 703.1 and 704.2. In the first two years since the program's inception in 2004, over 350 industry volunteers have filled nearly 600 roster positions in support of the reliability readiness audit program. These industry participants provide valuable insight based on their collective experiences to aid the audited entity and return to their own organizations with enhanced knowledge to improve their operations. Audit team members collaboratively identify areas for improvement and examples of excellence for a particular audited entity and prepare a report of the team findings. Members of the audit team either abide by codes of conduct requiring confidentiality or sign confidentiality agreements. *Id.* at § 704.5. In addition, all information gathered through the readiness audit process is treated as confidential. *Id.* at §§ 710.1 and 710.2. After permitting the audited entity to review and comment upon a draft report, NERC posts the final report of a readiness audit on its Web site. *Id.* at §§ 707.1 – 707.5.

If a readiness audit team discovers evidence of possible noncompliance with Reliability Standards, it reports this evidence to NERC for resolution through the Compliance Enforcement Program. ROP at § 706.3. Evidence of possible noncompliance is not disclosed in the readiness audit report, but only after completion of the appropriate compliance enforcement mechanisms. *Id.* The readiness audit teams operate separately from compliance audit teams. *Id.* at § 703.3.

## **G. NERC Funding for the ERO.**

### **1. NERC's Annual Budget and Business Plan**

NERC's budgeting and business plan development processes will be open and will extensively consider industry views. NERC's independence in this area will be maintained by virtue of the Board being the ultimate body to vote on and approve NERC's and the Regional Entities' budgets and business plans, prior to submission to the appropriate governmental authority.

NERC's fiscal year is the calendar year period commencing January 1. Bylaws, Article XIII, § 2. NERC's annual budget process will be initiated in March of each year to ensure sufficient time for member input. The Board will consult with the MRC and will post a draft budget and business plan for review and comment by NERC members, the MRC, and the NERC standing committees for at least 30 days prior to the date of the meeting of the Board at which the annual budget, business plan and funding mechanism are to be adopted. *Id.* at Article XIII, § 4. The Board will approve the 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 to the applicable governmental authorities at least 130 days in advance of the start of the fiscal year. Bylaws, Article XIII, § 2. This submittal will include the NERC and Regional Entity budgets, including the business plans and organizational charts, approved by the Board, NERC's annual funding requirement (including regional entity costs for delegated functions), the mechanism for assessing charges to recover the annual funding requirement, and all supporting materials in sufficient detail to justify the requested funding collection and budget expenditures. ROP at § 1105.1.

NERC and Regional Entity budgets and business plans will not be effective until approved by all applicable governmental authorities. Bylaws, Article XIII, § 6.

The Board also has the ability to modify the approved funding mechanism or develop and approve a supplemental funding mechanism if determined by the Board to be necessary due to a shortfall in revenues from projected levels, projects not provided for in the annual budget, or such other factors as in the judgment of the Board warrant modification of the funding mechanism or development of a supplemental funding mechanism. Bylaws, Article XIII, § 5. To the extent possible, the Board will seek member review and comment on any modification of the funding mechanism or development of a supplemental funding mechanism. *Id.* NERC will file any such modification of the funding mechanism or supplemental funding mechanism for approval with the applicable governmental authority prior to such change becoming effective. *Id.* at Article XIII, § 6.

Finally, NERC shall develop, in consultation with the Regional Entities, a reasonable and consistent system of accounts, to allow a meaningful comparison of actual results at the NERC and Regional Entity level by the applicable ERO governmental authorities. ROP, Section 1103.3.

## **2. ERO Oversight of Regional Entity Funding**

Section 1104 of NERC's Rules of Procedure addresses NERC's authority over the budgets of the Regional Entities. Each Regional Entity shall submit its annual budget for carrying out its delegated authority functions as well as all other activities and funding to NERC no later than June 1 of the prior year, together with supporting materials including their complete business plan and organization chart, explaining the proposed collection of all dues, fees, and charges and the proposed expenditure of funds collected in sufficient detail to justify the requested funding collection and budget expenditures. ROP at § 1104.1. The Regional Delegation Agreement (RDA) will also include detailed procedures for NERC's review of the



Regional Entity's budget and a plan for the collection of sufficient funds for delegated activities. See Pro Forma RDA at Section 8 (Exhibit D hereto). NERC shall review and approve each regional entity's budget for adequacy in meeting the requirements of its delegated authority. ROP at § 1104.2. NERC will either accept the budget or remand it back to the Regional Entity.

*Id.*

### **3. Billing and Collections**

As described in Section IV.F.1 above, NERC will submit a budget and funding requirements filing to the appropriate government authorities for approval. The proposal will seek recovery of all funding through a charge based on NEL collected from all load-serving entities (LSEs).

#### **a. NERC and Regional Entity Use of NEL for Allocation of Costs**

NERC and the Regional Entities agree that costs of carrying out both NERC and the Regional Entities' statutory functions shall be equitably allocated among end users within the geographic boundaries of each Regional Entity and recovered through a formula based on NEL. NERC will request the Regional Entity to identify all LSEs within the geographic boundaries of the Regional Entity and the NEL of each LSE. To minimize the administrative burden on NERC and the Regional Entities, allocation of funding requirements to any individual LSE of less than one hundred dollars (US) will be waived.<sup>15</sup>

NERC will accumulate the NEL by LSEs for each ERO governmental authority and submit the NEL proportional share of NERC funding requirements to each ERO governmental

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<sup>15</sup> In the event that any LSEs exist outside the geographic boundaries of the Regional Entities, NERC will separately assess them their appropriate share of ERO expenses on an NEL basis.

authority for approval together with supporting materials in sufficient detail to support the requested funding requirement.<sup>16</sup>

**b. Regional Entities as the Collection Agent**

As a component of the RDA, NERC will seek to have the Regional Entities perform the billing and collection function from the LSEs (or designated agents) within their geographic boundaries. NERC and the Regional Entities believe this is the most efficient and effective way to collect the funds from the entities that are required to pay. NERC will work with each Regional Entity to assure the billing and collection processes will provide:

- A clear validation of billing and application of payments.
- A minimum of data requests to those being billed.
- Adequate controls to assure integrity in the billing determinants including identification of entities subject to NERC's authority.
- Consistent billing and collection terms.

Absent an agreement to have a Regional Entity perform the collection function, NERC will bill and collect directly from the LSEs (or designated agent) within that Regional Entity's geographic boundaries.

A Regional Entity that performs the collection function on NERC's behalf will not be responsible for any non-payments. NERC will work with each Regional Entity to develop a procedure to notify NERC of all non-payments within 10 days of an invoice becoming past due. NERC will pursue any non-payments and will request assistance from applicable governmental authorities as necessary to secure collection.

**c. Flow of Collections**

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<sup>16</sup> Based on 2004 available data, the proportional share of NEL among countries was: United States, 87.5 percent, Canada, 12.3 percent, and Mexico, 0.2 percent.

The RDAs will provide that the collection of funds will be performed by the Regional Entities. Upon receipt of funds, the Regional Entity will forward all monies to NERC in a timely manner. NERC will disburse all monies related to Regional Entity functions back to the Regional Entity, also in a timely manner.

Absent an agreement with a Regional Entity to perform the collection function, NERC shall collect all of the funds from the LSEs (or designated agent) or as directed by the particular ERO governmental authorities and remit the Regional Entity portion of the funds to the Regional Entity in a timely manner.

#### **H. NERC's Plan for Reliability and Adequacy Assessment and Reporting.**

Section 800 of NERC's Rules of Procedure govern NERC's obligation to assess and report on the reliability and adequacy of the North American Bulk Power System. ROP at § 801. NERC will prepare three reliability assessment reports each year: a long-term reliability assessment report, an annual seasonal (summer) report, and an annual seasonal (winter) report. *Id.* at § 803. These reports will analyze electricity demand and the adequacy of supply throughout the North American Bulk Power System. *Id.* Section 800 of the Rules of Procedure describes the manner in which the assessments will be conducted and the reports prepared, and specifies the requirements for Regional Entities to provide data and information for purposes of the assessments. NERC will also prepare special reliability assessment reports on regional, interregional, or interconnection bases as conditions warrant or as requested by the Board. *Id.* at § 803.4. NERC will submit copies of all reliability assessment reports to the appropriate governmental authorities. In addition, this section requires NERC to analyze unusual events that occur on the Bulk Power System, identify the causes of those events, assess past reliability

performance, disseminate its findings to the industry, and develop reliability performance benchmarks. ROP at § 806.

The reliability and adequacy assessment activities are part of a larger program whose objectives are to: (1) conduct, and report the results of, an independent assessment of the overall reliability and adequacy of the interconnected North American bulk power systems, both as existing and as planned; (2) investigate and analyze off-normal events on the bulk power system; (3) identify the root causes of events that may be precursors of potentially more serious events; (4) assess past reliability performance for lessons learned; (5) disseminate findings and lessons learned to the electric industry to improve reliability performance; and (6) develop reliability performance benchmarks. ROP at § 800.

**I. NERC has a Plan for Its Transition to Become the First North American ERO.**

NERC's transition plan to full operating status as the ERO is included as Exhibit E to this Notice. NERC proposes an implementation date for the ERO of January 1, 2007. During the remainder of 2006, NERC plans to continue its efforts to obtain certification in the United States and recognition, as appropriate, from the relevant Canadian governmental authorities, to negotiate and execute RDAs with Regional Entities, to further develop its Reliability Standards and file those standards with the appropriate governmental authorities, to prepare an ERO and Regional Entity budgets for 2007, to establish and operationalize funding mechanisms to collect funds from LSEs, to enroll members in the ERO and establish the MRC, and to merge NERC Council into NERC Corporation. The merger will take place within 30 days after NERC receives FERC certification as the ERO, leaving NERC Corporation as the surviving entity and the certified ERO. In addition, NERC plans to negotiate and execute RDAs with Regional Entities within 90 days of FERC certification.

During 2006, NERC proposes to continue to utilize its current funding mechanism, which provides for funding through the existing regional reliability councils. While NERC does not anticipate a need for additional funding during 2006, it reserves the right to seek such funding if necessary. NERC has reorganized its staff to meet ERO requirements for the development of Reliability Standards; enforcement of compliance with Reliability Standards, including the compliance audit and organization certification programs; reliability assessment and performance analysis reports; reliability readiness audits; situation awareness and infrastructure security; and training, education, and personnel certification. In addition, NERC will evaluate Regional Entity standards development procedures. Through implementation of its transition plan, NERC will be prepared to fully implement all ERO requirements and comply with all ERO obligations by January 1, 2007.

## **V. RELIABILITY CONSIDERATIONS IN BRITISH COLUMBIA**

### **A. Relationship with Regional Council**

#### **1. Existing Relationship Between British Columbia Utilities and WECC**

British Columbia Transmission Corporation, BC Hydro, and Powerex are signatories to WECC's Reliability Management System Agreements. As such, all three utilities have agreed to be bound by WECC's standards.

#### **2. Applications of Mandatory Reliability Standards in the Province**

NERC expects that standards within the scope of the RMS agreement will continue to be made mandatory in British Columbia through those agreements and against the signatories to those agreements. NERC expects that this will be the case should WECC become a Regional Entity. However, the standards will not be mandatory with regard to those entities that have not signed the RMS agreement, and the RMS agreement does not cover all standards.

### **3. Compliance and Enforcement of Reliability Standards**

The contractual relationships between the British Columbia utilities and WECC provide for compliance and enforcement of reliability standards. WECC compliance and enforcement, however, do not extend to entities that are not signatories to the RMS agreements. It is NERC's understanding that appeals of WECC decisions are sent to arbitration and that appeals of arbitration decisions are heard in the British Columbia courts.

#### **B. Coordination with Governmental Authority**

To be effective as the ERO, NERC must closely coordinate standards development, compliance, reliability assessments, and other ERO functions with FERC and Canadian provincial regulators. NERC is in the process of developing a Memorandum of Understanding with this Province for coordination of activities and authorities, including coordination of information upon any enforcement actions taken within the Province. NERC commits to completing this exercise.

#### **C. ERO Funding**

NERC is currently funded by the regional councils, and British Columbia utilities fund WECC through the WECC member agreement. NERC may not seek a change in this funding approach, but is requesting clarification that the funding through WECC will be consistent with the approach taken in the U.S. and recommended by the Bilateral Group, even after a regional entity is established. To that end, NERC proposes an allocation of its costs to load-serving entities based on Net Energy for Load (NEL). This approach is practical and best approximates the goal of allocating costs to those who benefit from a reliable bulk power system — the end users.

#### **D. Reliability Legislation in British Columbia**

It is NERC's understanding that legislation may be enacted in the Province establishing clear governmental authority to approve and enforce Reliability Standards over all users, owners, and operators of the bulk power system in the Province. Upon enactment of such legislation, NERC will file in this Province an Application for Recognition as the Electric Reliability Organization or other appropriate filing.

**VI. CONCLUSION**

As described in this Notice and its exhibits, NERC will be able to operate effectively as an international ERO. NERC looks forward to working with officials in this Province on these issues.

Respectfully submitted,

NORTH AMERICAN ELECTRIC  
RELIABILITY COUNCIL

By     /s/ Rick Sergel      
President and Chief Executive Officer  
North American Electric Reliability Council  
116-390 Village Boulevard  
Princeton, New Jersey 08540-5731

April 4, 2006

**CERTIFICATE OF INCORPORATION**  
**OF THE**  
**NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION**

The undersigned do hereby associate themselves into a Corporation, for a lawful purpose other than for pecuniary profit under and by virtue of the New Jersey Nonprofit Corporation Act, New Jersey Statutes Title 15A, and pursuant thereto, do hereby certify:

**FIRST:** The name of the Corporation is the NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION.

**SECOND:** The purposes for which the Corporation is organized are:

- a. to promote the reliable planning and operation of the electric bulk power systems of North America;
- b. to act as the electric reliability organization for the United States as certified by the Federal Energy Regulatory Commission and for Canada and Mexico as recognized by applicable government and regulatory authorities in such countries, all pursuant to law;
- c. to develop, implement, and enforce, consistent with executed agreements with regional entities and approvals by applicable regulatory authorities, standards that provide for the reliable planning and operation of the electric bulk power systems of North America; and
- d. to conduct such other lawful business and activities, not otherwise inconsistent with the specific purposes set forth herein, in which a corporation subject to the New Jersey Nonprofit Corporation Act may engage.

**THIRD:** The Corporation is organized and shall operate as a business league within the meaning of Section 501(c)(6) of the United States Internal Revenue Code of 1954. The Corporation shall not have or issue capital stock or shares.

**FOURTH:** The Corporation shall have members. The qualifications of the members of the Corporation shall be as set forth in the Bylaws of the Corporation.

**FIFTH:** The members of the Corporation shall be divided into classes as provided in the Bylaws, and the rights and limitations of the various classes of members shall be as provided in the Bylaws.

**SIXTH:** The business, property, and affairs of the Corporation, subject to its Bylaws, shall be managed and conducted by a Board of Trustees, of which there shall be that



number of Trustees, not less than three, which shall be fixed by the Bylaws. The trustees shall be appointed or elected as the Bylaws provide and their terms of office shall be two years or such other terms as the Bylaws may provide, and until their successors are elected, except that the names and post office addresses of the initial trustees of the Corporation are:

<u>NAME</u>	<u>POST OFFICE ADDRESS</u>
John Q. Anderson	4600 Touchton Road East, Bldg. 100 Suite 150 Jacksonville, Florida 32246
Paul F. Barber	322 Brandon Boulevard Freehold, New Jersey 07728
Thomas W. Berry	33 Inwood Circle Chatham, New Jersey 07928
Richard Drouin	1000, de La Gauchetière Stree West Suite 2500 Montreal, Quebec, Canada H3B 0A2
James M. Goodrich	524 Manor Ridge Drive Atlanta, Georgia 30305
Frederick W. Gorbet	440 Bedford Park Avenue Toronto, Ontario, Canada M5M 1K1
Donald P. Hodel	P.O. Box 23099 Silverthorn, Colorado 80498
Sharon L. Nelson	900 4th Avenue, Suite 200 Seattle, Washington 98164
Kenneth G. Peterson	1936 Parker Street Vancouver, British Columbia, Canada V5L 2L3
Bruce A. Scherr	775 Ridge Lake Boulevard Suite 400 Memphis, Tennessee 38120
Richard P. Sergel	34 Brook Street Wellesley, Massachusetts 02482

**SEVENTH:** The name and post office address of the registered office of the Corporation is: North American Electric Reliability Corporation, 116-390 Village Boulevard,

Princeton, New Jersey 08540-5731. The name of the registered agent of the Corporation on whom process against the Corporation may be served at that address is: Joseph K. Conner, Jr.

**EIGHTH:** The names and post office addresses of the incorporators of the Corporation are:

<u>NAME</u>	<u>POST OFFICE ADDRESS</u>
David N. Cook	75 E. Shrewsbury Place Princeton, New Jersey 08540
Joseph K. Conner, Jr.	1084 Lily Pond Lane Yardley, Pennsylvania 19067

**NINTH:** No trustee, officer, or member of the Corporation shall as such receive or become entitled to receive at any time any part of the net income of the Corporation, nor shall any part of the net earnings of the Corporation inure to the benefit of any person, except as reasonable compensation for services rendered and reimbursements for expenses actually incurred in conducting its affairs and carrying out its purposes.

**TENTH:** Upon dissolution, after payment of all debts, no part of the remaining assets of the Corporation may be distributed to any trustee of the Corporation, but shall be distributed as the Bylaws may direct in accordance with law, provided, however, that the distribution must conform to the distribution requirements of Section 501(c)(6) of the United States Internal Revenue Code of 1954.

**ELEVENTH:** No amendment, change, or alteration of this Certificate of Incorporation shall be made without the approval of two-thirds of the classes of members at any meeting of the members or the consent of two-thirds of the classes of members acting without a meeting. For purposes of this paragraph ELEVENTH, each class of members shall have one vote, which shall be allocated for and against the proposed amendment based on the number of votes of the members in each class cast for and against the proposed amendment, and the proportions of the votes of each class for and against the proposed amendment shall be summed to determine the total votes of the classes for and against the proposed amendment. Written notice of the proposed amendment, change, or alteration of this Certificate of Incorporation shall be included in the notice of the meeting or the call for action without a meeting of members given to each member in accordance with the Bylaws.

**TWELFTH:** No trustee or officer of the Corporation shall be personally liable to the Corporation for damages for breach of any duty owed to the Corporation, except for liabilities arising from breach of any duty based upon an act or omission (1) in breach of the duty of loyalty owed to the Corporation or its members, (2) not in good faith or involving a knowing violation of law, or (3) resulting in receipt by such trustee or officer of an improper personal benefit. Neither the amendment nor repeal of this paragraph TWELFTH, nor the adoption of any provision of this Certificate of Incorporation inconsistent with this paragraph TWELFTH, shall eliminate or reduce the protection offered by this paragraph TWELFTH to a trustee or officer of

the Corporation in respect to any matter which occurred, or any cause of action, suit, or claim which but for this paragraph TWELFTH would have accrued or arisen, prior to such amendment, repeal, or adoption.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this 28<sup>th</sup> day of March, 2006.

/s/ David N. Cook  
David N. Cook

/s/ Joseph K. Conner, Jr.  
Joseph K. Conner, Jr.  
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**PROPOSED 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.

- a. “Board” means the Board of Trustees of the Corporation.
- b. “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, but does not include facilities used in the local distribution of electricity.
- c. “Commission” means the Federal Energy Regulatory Commission.
- d. “Electric reliability organization” means the organization that is certified by the Commission pursuant to Section 39.3 of its regulations, and may also have received recognition by appropriate governmental authorities in Canada and Mexico, as applicable, to establish and enforce reliability standards for the bulk power systems of the respective countries.
- e. “Member” means a member of the Corporation pursuant to Article II of these Bylaws.
- f. “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 for all purposes under these Bylaws shall be based on the most recent calendar year for which data on net energy for load of applicable regions of the United States, Canada, and Mexico is available.
- g. “Regional entity” means an entity with which the Corporation has entered into a delegation agreement to delegate, or to which the Commission or a governmental authority in Canada or Mexico has directly assigned, enforcement authority for reliability standards for the bulk power system in a defined geographic area of North America.
- h. “Regional reliability organization” means each of the following organizations or any successor organizations: Electric Reliability Council of Texas, Florida Reliability Coordinating Council, Midwest Reliability Organization, Northeast Power

Coordinating Council, Reliability *First* Corporation, Southeastern Electric Reliability Council, Southwest Power Pool, and Western Electricity Coordinating Council.

- i. “Reliability standard” means a requirement to provide for reliable operation of the bulk power system, including without limiting the foregoing requirements for the operation of existing 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 of the bulk power system, but shall not include any requirement to enlarge bulk power system facilities or to construct new transmission capacity or generation capacity.
- j. “Reliable operation” means operating the elements of the 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 will not occur as a result of a sudden disturbance, including a cybersecurity incident, or unanticipated failure of system elements.
- k. “Sector” means a group of members of the Corporation that are bulk power system owners, operators, or users or other persons and entities with substantially similar interests, including governmental entities, as pertinent to the purposes and operations of the Corporation and the operation of the bulk power system, as defined in Article II, Section 4 of these Bylaws. Each sector shall constitute a class of members for purposes of the New Jersey Nonprofit Corporation Act.
- l. “System operator” means any entity that performs the function or functions of a balancing authority, a transmission operator, and/or a reliability coordinator.

**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”, 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 of the North American bulk power system and that registers with the Corporation 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 reliability organization or 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** — 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. Any person or entity registering to become a member of the registered ballot body of the Corporation shall automatically be registered as and become a member of the Corporation, unless such person or entity affirmatively elects not to become a member of the Corporation. 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 shall establish a date by which members shall submit their registration renewals. All members shall be required to renew their registrations within 30 calendar days of a request by the secretary of the Corporation, using a registration renewal form prescribed by the 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 30 days following a date established by the 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 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, 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 for any injury or damage 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 fraud.

## Section 4 — Membership Sectors

- a. Each member shall elect to be assigned to one of the following membership 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 reliability organization; or (xii) government representatives. The composition of each sector shall be as follows:
- i. Investor-owned utility — This sector includes any investor-owned entity with 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.
  - ii. State/municipal utility — This 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.
  - iii. Cooperative utility — This 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 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.
  - iv. Federal or provincial utility/Federal Power Marketing Administration — This 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.
  - v. Transmission-dependent utility — This 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.
  - vi. Merchant electricity generator — This 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 sectors

- (i) through (v). This 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.
- vii. Electricity marketer — This 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 also includes organizations that represent the interests of such entities.
- viii. Large end-use electricity customer — This 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 also includes organizations that represent the interests of such entities.
- ix. Small end-use electricity customer — This sector includes any person or entity within North America that takes service below 50 kV; and any single end-use customer 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.
- x. Independent system operator/regional transmission organization — This 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. This sector also includes organizations that represent the interests of such entities.
- xi. Regional reliability organization — This sector includes any regional reliability organization as defined in Article I, Section 1.
- xii. Government representatives — This sector includes any federal, state, or provincial government department or agency in North America having a regulatory and/or policy interest in wholesale electricity. Entities with regulatory oversight over the Corporation or any 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 with respect to the approval and/or enforcement of reliability standards, may be nonvoting members of this sector.



- b. A member may elect to be assigned to any sector so long as membership in that sector is consistent with the member's business or other activities. 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, 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 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 at which a quorum of the board entitled to vote is present. Within thirty (30) days following the action of the 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 in Canada or Mexico.

### **ARTICLE III 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 shall consist of eleven members (the "trustees"). Ten (10) of the trustees shall be "independent" trustees nominated and elected in accordance with the requirements and procedures specified in Sections 2, 3, 4, and 5 of this Article III (the "independent trustees"). The remaining trustee shall be the person elected by the 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 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.

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

- a. The board shall consist of a number of trustees from the United States and from 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, rounded up to the nearest whole number. For purposes of this board composition requirement, the management trustee shall be counted as a trustee from Canada if he or she is a Canadian citizen.
- b. When the Corporation receives recognition by appropriate regulatory authorities in Mexico as its electric reliability organization, the number of independent trustees will be increased by at least one, and the 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 who is not an officer or employee of the Corporation, a member or an officer, director, or employee of a member of the Corporation, or an officer, director, or employee of any entity that would reasonably be perceived as having a direct financial interest in the outcome of board decisions and who does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a trustee.
- b. 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 effective date of these Bylaws, the independent trustees of the Corporation and the date the term of each independent trustee expires are as follows:

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

- c. 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 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 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 in accordance with country participation pursuant to Section 2 of this Article III.

**Section 5 — Nominating Committee** — The 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 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 during the current year and such number of other persons

with such qualifications as the board shall specify, provided, that the nominating committee shall be chaired by an independent trustee whose term does not expire during the current year and shall include at least three persons who are also members of the Member Representatives Committee. The 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 consistent with the requirements of Article III, Section 2 for 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 — Appointment of Management Trustee** — The president of the Corporation shall be appointed as the management trustee of the Corporation, effective as of the date of his or her election by the 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. No action of the members of the Corporation or the Member Representatives Committee shall be required in connection with the appointment of the president as the management trustee of the Corporation.

**Section 8 — Committees of the Board** — The board shall by resolution create and appoint all committees of the board as the 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 shall have such duties as are

prescribed by the board.

## **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 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 sectors. Meetings of members shall be held at the principal office of the Corporation or at such other place fixed by the 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 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 of the Corporation shall have one vote, except that if less than one-half of the members in a sector are present, in person or by proxy, at the meeting, the vote of that sector shall be weighted by a percentage equal to the number of members of the sector present in person or by proxy at the meeting divided by one-half of the members in the sector; (ii) the vote of each 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 voting in person or by proxy; and (iii) the proportions of the votes of each 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** — Any action, required or permitted to be taken at a meeting of members, may be taken without a meeting if the action is consented to in writing by the minimum number of members that would be required to approve the action at a meeting of the members at which all members were present. The call for action without a

meeting of members may be initiated by the chairman of the 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 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 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 at approximately the same 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.

## **ARTICLE V**

### **Meetings of the Board of Trustees**

**Section 1 — Regular Meetings of the Board** — A regular meeting of the 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, the board may provide for additional regular meetings that may be held without notice.

**Section 2 — Special Meetings of the Board** — Special meetings of the 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. Such notice shall specify the time, date, place, and purpose or purposes of the meeting and may be given by telephone, telegraph, or other electronic media, or by express delivery.

**Section 3 — Quorum and Voting Requirements for Meetings of the 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 shall be a majority of the trustees, and (ii) actions by the 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, and all nonconfidential material provided to the board, shall be posted on the Corporation’s Web site, and notice of meetings of the board shall be sent electronically to members of the Corporation, at approximately the same time that notice or such material is given to the trustees. Meetings of the board shall be open to the public, subject to reasonable limitations due to the availability and size of meeting facilities; provided, that the 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, or a meeting of a committee, by means of a communications system by which all persons participating in the meeting are able to hear each other.

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

Notice of a 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 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 —**

Any action, required or permitted to be taken at a meeting of the board or of any committee thereof, may be taken by the board or by the committee without a meeting if the action is consented to in writing by the number of 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 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 in connection with the call for action without a meeting, shall be posted on the Corporation's Web site at approximately the same time notice of the call for action without a meeting or such material is provided to the board. The call for action without a meeting of a committee of the 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 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 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. All of the remaining officers shall be appointed or removed by the 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, 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. The chairman, in consultation with the other trustees, shall be responsible for

the efficient operation of the board and its committees. The chairman shall be an ex officio member of each committee of the board. The chairman may delegate from time to time any or all of the aforesaid duties and authority to the vice chairman, 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.
- 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; 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 shall appoint members in accordance with the requirements of these Bylaws, the board may by resolution create standing committees of the Corporation; and may in addition by resolution appoint such other committees as the board deems necessary to carry out the purposes of the Corporation. The 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) 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.

## **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 XVI; and
- c. 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.

Because it is elected by the members of the Corporation and not appointed by the 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.

**Section 2 — Composition of the Member Representatives Committee** — The Member Representatives Committee shall consist of (i) two representatives from each sector except the government representative sector and the regional reliability organization sector, (ii) one representative from each regional reliability organization, (iii) the chairman and vice chairman of the Member Representatives Committee, (iv) any additional Canadian representatives as are selected pursuant to Section 4 of this Article VIII, and (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 provincial government, all of whom shall be nonvoting members of the Member Representatives Committee except the two representatives of state governments. The representatives of each sector shall be members of the Corporation, or



officers or executive-level employees, agents or representatives of members of the Corporation, in that sector; provided, that at any time only one officer, employee, agent, or representative of a member in a sector may be a representative from that sector. No member of the board shall be a member of the Member Representatives Committee. The 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, 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 sector adopts an alternative election procedure, the annual election of representatives from each 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. A nominee for election as a sector representative must be a member, or an officer, executive-level employee or agent of a member, in that 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 sector; if more than one officer, employee or agent of a member or its affiliates is nominated for election from a 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 sector shall have one vote for each representative to be elected from the 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 sector shall be elected to the representative position to be filled from that sector; if there is more than one representative position to be filled from a 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 sector casting votes in the election. If no nominee in a 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 sector.

A 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. Any alternative procedure is subject to review and disapproval by the board.

The provisions of this Section 3a shall not apply to the regional reliability organization sector.

- b. The representative from each regional reliability organization shall be elected by the members of the regional reliability organization in a fair and transparent voting process that has been approved by vote of at least two-thirds of the members of the regional reliability organization. Such procedure is subject to review and disapproval by the 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 vote total 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, 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. Such additional Canadian voting representatives shall be representatives of the 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, 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 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. Selection of the chairman and vice chairman shall not be subject to approval of the board. The chairman and vice chairman, upon assuming such positions, shall cease to act as representatives of the 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 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, the vacancies in the sector representatives created by the selection of the chair and vice chair pursuant to Section 5 of this Article VIII shall 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 notice.

**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 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, or other electronic media, 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. 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, at approximately the same 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 communications system by which all persons participating in the meeting are able to hear each other.

**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**

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. 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) 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 at approximately the same time notice of the call for action without a meeting or such material is provided to the members of the Member Representative Committee. The members of the Member Representatives Committee shall receive written notice of the results, and 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 \_\_\_\_\_, 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 standards that provide for reliable operation of the bulk power systems of North America. All reliability standards shall be approved by the board. All 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 \_\_\_\_\_, 2006.

**Section 2 — Procedures for Development of Reliability Standards** — The Corporation shall develop 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 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 standards that are technically sound. Participation in the process for development of 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 of the 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 has violated a 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 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 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 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 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 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 shall be delegated the authority of the Corporation to enforce reliability standards within a geographic region of North America and may develop and propose reliability standards to be in effect within such region. All delegation agreements with regional entities shall be approved by the board. No delegation agreement with a regional entity shall be effective with respect to a region until the agreement has received any necessary approval from an applicable governmental authority.

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

**Section 3 — Other Agreements** — The Corporation may enter into an agreement with a regional entity to define the respective roles of the Corporation and such regional entity. As appropriate, this agreement may address such issues as the development and scope of regional standards, enforcement and funding.

## **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 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; (ii) development of reliability standards; (iii) procedures for standing committees of the Corporation, subgroups of standing committees, and other committees, subcommittees, task forces, and sector-specific forums of the Corporation; (iv) critical infrastructure protection; (v) conduct of readiness audits and reliability assessments; (vi) enforcement of compliance with reliability standards and determinations of violations of reliability standards by owners, operators, and users of the bulk power system; (vii) impositions of sanctions for violations of reliability standards; (viii) development, implementation, and administration of delegation agreements with regional entities; (ix) personnel certification; (x) event analysis and information exchange; (xi) real-time monitoring of the 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. 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 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 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. All Rules of Procedure and amendments to and repeals of Rules of Procedure approved by the 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 \_\_\_\_\_, 2006.

## **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 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 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 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 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 or any board committee attended by an independent trustee. No compensation shall be paid to the management trustee for his or her services on the 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 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) shall be approved by the board at a regular meeting or a special meeting of the board duly called for that purpose. The 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 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 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 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 may modify the approved funding mechanism or develop and approve a supplemental funding mechanism if determined by the 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 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 shall follow the provisions of Section 4 of this Article XIII to the extent possible in the judgment of the 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 at a regular meeting or a special meeting of the 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 (including the annual budget, annual business plan, and annual, modified, or supplemental funding mechanism for each 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 approved 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 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 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 shall have the right to alter, amend, or repeal Bylaws adopted by the 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 sectors at a meeting of Members called for that purpose, or by written consent of two-thirds of the 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, amended repeal, or adoption of Bylaws shall be subject to any applicable requirements for filing with or approval by the Commission or any other 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 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, 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 1954.

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# **Electric Reliability Organization**

## **Rules of Procedure**

**NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL**

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## **SECTION 100 — APPLICABILITY OF RULES OF PROCEDURE**

NERC and NERC members shall comply with these rules of procedure. Each regional entity shall comply with these rules of procedure as applicable to functions delegated to the regional entity by NERC or as required by an appropriate governmental authority or as otherwise provided.

Each bulk power system owner, operator, and user shall comply with all rules of procedure of NERC that are applicable to such entities, where required by applicable legislation, regulation, or agreement.

Any entity that is unable to comply or that is not in compliance with a NERC rule of procedure shall immediately notify NERC in writing, stating the rule of concern and the reason for not being able to comply with the rule.

NERC shall evaluate each case and inform the entity of the results of the evaluation. If NERC determines that a rule has been violated, or cannot practically be complied with, NERC shall notify the applicable governmental authorities and take such other actions as NERC deems appropriate to address the situation.

## **SECTION 200 — DEFINITIONS OF TERMS**

### **201. General**

For purposes of NERC rules of procedure, the terms defined in Section 202 shall have the meaning set forth therein. Other terms are defined within particular sections of the rules of procedure. Other terms used but not defined in the rules of procedure shall be defined in NERC's Bylaws, the NERC Glossary of Terms, or in accordance with their commonly understood and used technical meanings in the electric power industry, including applicable codes and standards.

### **202. Specific Definitions.**

1. "Board" means the Board of Trustees of NERC.
2. "Canadian" means one of the following: (a) a company or association incorporated or organized under the laws of Canada, or its designated representative(s) irrespective of nationality; (b) an agency of a federal, provincial, or local government in Canada, or its designated representative irrespective(s) of nationality; or (c) a self-representing individual who is a Canadian citizen residing in Canada.
3. "ERO" means North American Electric Reliability Corporation, the Electric Reliability Authority.
4. "ERO governmental authority" is a government agency that has subject matter jurisdiction over the reliability of the bulk power system within its jurisdictional territory. In the United States, the ERO governmental authority is the Federal Energy Regulatory Commission. In Canada, the ERO governmental authority resides with applicable federal and provincial governments who may delegate duties and responsibilities to other entities. Use of the term is intended to be inclusive of all applicable authorities in the United States, Canada, and Mexico, and is not restricted to those listed here.
5. "Regional entity" means an entity with which the Corporation has entered into a delegation agreement to delegate, or to which the Federal Energy Regulatory Commission or a governmental authority in Canada or Mexico has directly assigned, enforcement authority for reliability standards for the bulk power system in a defined geographic area of North America.
6. "Regional reliability organization" means each of the following organizations or any successor organizations: Electric Reliability Council of Texas, Florida Reliability Coordinating Council, Midwest Reliability Organization, Northeast Power Coordinating Council, Reliability *First* Corporation, Southeastern Electric Reliability Council, Southwest Power Pool, and Western Electricity Coordinating Council.



7. “Bulk power system” means facilities and control systems necessary for operating an interconnected electric energy supply and transmission network (or any portion thereof), and electric energy from generating facilities needed to maintain transmission system reliability, but does not include facilities used in the local distribution of electricity.
8. “Interconnection” means an electric energy supply and transmission network in which the component electric facilities are interconnected and operated synchronously and to which the only connections to other electric networks are asynchronous.
9. “Reliable operation” means operating the elements of the bulk power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cyber security incident, or unanticipated failure of system elements.
10. “Reliability standard” means a requirement to provide for reliable operation of the bulk power system, including without limiting the foregoing, requirements for the operation of existing bulk power system facilities, including cyber security protection, and including the design of planned additions or modifications to such facilities to the extent necessary for reliable operation of the bulk power system; but shall not include any requirement to enlarge bulk power system facilities or to construct new transmission capacity or generation capacity.
11. “Entity variance” means an aspect of a reliability standard that applies only within a particular entity or a subset of entities within a limited portion of a regional entity, such as a variance that would apply to a regional transmission organization or particular market or to a subset of bulk power system owners, operators or users. An entity variance may not be inconsistent with or less stringent than the reliability standards as it would otherwise exist without the entity variance. An entity variance shall be approved only through the NERC standards development procedure and shall be made part of the NERC reliability standards.
12. “Regional variance” means an aspect of a reliability standard that applies only within a particular regional entity or group of regional entities. A regional variance may be used to qualify how a particular regional entity or regional entities achieve the objectives of a reliability standard or may establish different measures or performance criteria as necessary to achieve reliability within the particular regional entity or group of regional entities. A regional variance may not be inconsistent with the reliability standards, as it would otherwise exist without the regional variance. Such a regional variance may be proposed by a regional entity and, if adopted by NERC and approved by the ERO governmental authority, shall be enforced within the applicable regional entity or regional entities pursuant to delegated authority.

13. “Regional reliability standard” means a type of reliability standards that is applicable only within a particular regional entity or group of regional entities. A regional reliability standard may augment, add detail to, or implement another reliability standard or cover matters not addressed by other reliability standards. Regional reliability standards, upon adoption by NERC and approval by the applicable ERO governmental authority(ies), shall be reliability standards and shall be enforced within the applicable regional entity or regional entities pursuant to delegated authorities.
14. “Regional criteria” means reliability requirements developed by a regional reliability organization that are necessary to implement, to augment, or to comply with reliability standards, but which are not reliability standards. Such regional reliability organization criteria may be necessary to account for physical differences in the bulk power system but are not inconsistent with reliability standards nor do they result in lesser reliability. Such regional reliability organization criteria are not enforceable pursuant to NERC-delegated authorities, but may be enforced through state or provincial actions to ensure the safety, adequacy and reliability of electric service in their respective jurisdictions, or through other available mechanisms. Regional reliability organization criteria may include specific acceptable operating or planning parameters, guides, agreements, protocols or other documents.
15. “Net Energy for Load” or “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 the storage of energy at energy storage facilities.
16. “System operator” means any entity that operates or is responsible for the operation of a portion of the bulk power system, including but not limited to a balancing authority, a transmission operator, an independent transmission system operator, a regional transmission organization, a transmission company, a reliability coordinator, or other entity performing similar functions.
17. “Confirmed violation” is one for which an entity has: 1) accepted the finding of the violation by a regional entity or NERC and will not seek an appeal, 2) completed the appeals process within NERC, or 3) allowed the time for submitting an appeal to expire. The confirmed violation in this instance may be further appealed to the appropriate governmental authorities.

## SECTION 300 — RELIABILITY STANDARDS DEVELOPMENT

### 301. General

NERC shall develop and maintain reliability standards that apply to bulk power system owners, operators, and users and that enable NERC and regional entities to measure the reliability performance of bulk power system owners, operators, and users; and to hold them accountable for reliable operation of the bulk power systems. The reliability standards shall be technically excellent, timely, just, reasonable, not unduly discriminatory or preferential, and in the public interest, or consistent with such other applicable standards of governmental authorities.

### 302. Essential Attributes for Technically Excellent Reliability Standards

1. **Applicability** — Each reliability standard shall clearly identify the functional classes of entities responsible for complying with the reliability standard, with any specific additions or exceptions noted. Such functional classes<sup>1</sup> include: reliability coordinators, balancing authorities, transmission operators, transmission owners, generator operators, generator owners, interchange authorities, transmission service providers, market operators, planning authorities, transmission planners, resource planners, load-serving entities, purchasing-selling entities, and distribution providers. Each reliability standard shall also identify the geographic applicability of the standard, such as the entire North American bulk power system, an interconnection, or within a regional entity area. A standard may also identify any limitations on the applicability of the standard based on electric facility characteristics.
2. **Reliability Objectives** — Each reliability standard shall have a clear statement of purpose that shall describe how the standard contributes to the reliability of the bulk power system. The following general objectives for the bulk power system provide a foundation for determining the specific objective(s) of each reliability standard:
  - 2.1 **Reliability Planning and Operating Performance** — Bulk power systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions.
  - 2.2 **Frequency and Voltage Performance** — The frequency and voltage of bulk power systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
  - 2.3 **Reliability Information** — Information necessary for the planning and operation of bulk power systems shall be made available to those entities responsible for planning and operating of reliable bulk power systems.

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<sup>1</sup> These functional classes of entities are derived from NERC's Reliability Functional Model. When a standard identifies a class of entities to which it applies, that class must be defined in the Glossary of Terms Used in Reliability Standards.

- 2.4 **Emergency Preparation** — Plans for emergency operation and system restoration of bulk power systems shall be developed, coordinated, maintained, and implemented.
- 2.5 **Communications and Control** — Facilities for communication, monitoring, and control shall be provided, used, and maintained for the reliability of bulk power systems.
- 2.6 **Personnel** — Personnel responsible for planning and operating bulk power systems shall be trained, qualified, and shall have the responsibility and authority to implement actions.
- 2.7 **Wide-area View** — The reliability of the bulk power systems shall be assessed, monitored, and maintained on a wide-area basis.
- 2.8 **Security** — Bulk power systems shall be protected from malicious physical or cyber attacks.
3. **Performance Requirement or Outcome** — Each reliability standard shall state one or more performance requirements, which if achieved by the applicable entities, will provide for a reliable bulk power system, consistent with good utility practices and the public interest. Each requirement is not a “lowest common denominator” compromise, but instead achieves an objective that is the best approach for bulk power system reliability, taking account of the costs and benefits of implementing the proposal.
4. **Measurability** — Each performance requirement shall be stated so as to be objectively measurable by a third party with knowledge or expertise in the area addressed by that requirement. Each performance requirement shall have one or more associated measures used to objectively evaluate compliance with the requirement. If performance can be practically measured quantitatively, metrics shall be provided to determine satisfactory performance.
5. **Technical Basis in Engineering and Operations** — Each reliability standard shall be based upon sound engineering and operating judgment, analysis, or experience, as determined by expert practitioners in that particular field.
6. **Completeness** — Reliability standards shall be complete and self-contained. The standards shall not depend on external information to determine the required level of performance.
7. **Consequences for Noncompliance** — In combination with guidelines for penalties and sanctions, as well as other ERO and regional entity compliance documents, the consequences of violating a standard are clearly known to the responsible entities.
8. **Clear Language** — Each reliability standard shall be stated using clear and unambiguous language. Responsible entities, using reasonable judgment and in

keeping with good utility practices, are able to arrive at a consistent interpretation of the required performance.

9. **Practicality** — Each reliability standard shall establish requirements that can be practically implemented by the assigned responsible entities within the specified effective date and thereafter.
10. **Consistent Terminology** — To the extent possible, reliability standards shall use a set of standard terms and definitions that are approved through the NERC reliability standards development process.

### **303. Relationship Between Reliability Standards and Competition**

To ensure reliability standards are developed with due consideration of impacts on competition, to ensure standards are not unduly discriminatory or preferential, and recognizing that reliability is an essential requirement of a robust North American economy, each reliability standard shall meet all of these market-related objectives:

1. **Competition** — A reliability standard shall not give any market participant an unfair competitive advantage.
2. **Market Structures** — A reliability standard shall neither mandate nor prohibit any specific market structure.
3. **Market Solutions** — A reliability standard shall not preclude market solutions to achieving compliance with that standard.
4. **Commercially Sensitive Information** — A reliability standard shall not require the public disclosure of commercially sensitive information. All market participants shall have equal opportunity to access commercially non-sensitive information that is required for compliance with reliability standards.
5. **Adequacy** — NERC shall not set standards defining an adequate amount of, or requiring expansion of, bulk power system resources or delivery capability.

### **304. Essential Principles for the Development of Reliability Standards**

NERC shall develop reliability standards in accordance with the NERC *Reliability Standards Development Procedure*, which is incorporated into these rules as **Appendix**

**1.** Appeals in connection with the development of a reliability standard shall also be conducted in accordance with the NERC *Reliability Standards Development Procedure*. Any amendments or revisions to the *Reliability Standards Development Procedure* shall be consistent with the following essential principles.

1. **Openness** — Participation shall be open to all persons who are directly and materially affected by the reliability of the North American bulk power system. There shall be no undue financial barriers to participation. Participation shall not be conditional upon membership in NERC or any other organization, and shall

not be unreasonably restricted on the basis of technical qualifications or other such requirements.

2. **Transparency** — The process shall be transparent to the public.
3. **Consensus-building** — The process shall build and document consensus for each standard, both with regard to the need and justification for the standard and the content of the standard.
4. **Fair Balance of Interests** — The process shall fairly balance interests of all stakeholders and shall not be dominated by any single interest category.
5. **Due Process** — Development of standards shall provide reasonable notice and opportunity for any person with a direct and material interest to express views on a proposed standard and the basis for those views; and to have that position considered in the development of the standards.
6. **Timeliness** — Development of standards shall be timely and responsive to new and changing priorities for reliability of the bulk power system.

### **305. Registered Ballot Body**

NERC reliability standards shall be approved by a registered ballot body prior to submittal to the board and then to ERO governmental authorities for their approval, where authorized by applicable legislation or agreement. This Section 305 sets forth the rules pertaining to the composition of, and eligibility to participate in, the registered ballot body.

1. **Eligibility to Vote on Standards** — Any person or entity may join the registered ballot body to vote on standards, whether or not such person or entity is a member of NERC.
2. **Inclusive Participation** — The segment qualification guidelines are inclusive; i.e., any entity with a legitimate interest in the reliability of the bulk power system that can meet any one of the eligibility criteria for a segment is entitled to belong to and vote in each segment for which it qualifies, subject to limitations defined in Sections 305.3 and 305.5.
3. **General Criteria for Registered Ballot Body Membership** — The general criteria for membership in the segments are:
  - 3.1 **Multiple Segments** — A corporation or other organization with integrated operations or with affiliates that qualifies to belong to more than one segment (e.g., transmission owners and load serving entities) may join once in each segment for which it qualifies, provided that each segment constitutes a separate membership and the organization is represented in each segment by a different representative. Affiliated entities are collectively limited to one membership in each segment for which they are qualified.

- 3.2 **Withdrawing from a Segment or Changing Segments** — After their initial registration in a segment, each registered participant may elect to withdraw from a segment or apply to change segments at any time.
- 3.3 **Review of Segment Criteria** — The board shall review the qualification guidelines and rules for joining segments at least every three years to ensure that the process continues to be fair, open, balanced, and inclusive. Public input will be solicited in the review of these guidelines.
- 4. **Proxies for Voting on Standards** — Any registered participant may designate an agent or proxy to vote on its behalf. There are no limits on how many proxies an agent may hold. However, for the proxy to be valid, NERC must have in its possession, either in writing or by email, documentation that the voting right by proxy has been transferred from the registered participant to the agent.
- 5. **Stakeholder Segments** — The specific criteria for membership in each registered ballot body segment shall be as follows:

- 5.1. **Segment 1 — Transmission Owners**

The following entities are eligible to join Segment 1.

- 5.1.1 Any entity that owns or controls at least 200 circuit miles of integrated transmission facilities, or has an open access transmission tariff or equivalent.
- 5.1.2 Transmission owners that have placed their transmission under the operational control of a regional transmission organization.
- 5.1.3 Independent transmission companies or organizations, merchant transmission developers, and transcos that are not regional transmission organizations.
- 5.1.4 This segment excludes regional transmission organizations and independent system operators (they are eligible to join Segment

- 5.2 **Segment 2 — Regional Transmission Organizations, Independent System Operators, and RROs**

The following entities are eligible to join Segment 2.

- 5.2.1 Authorized by appropriate governmental authority to operate as regional transmission organization or independent system operator.
- 5.2.2 Regional reliability organizations.
- 5.2.3 In cases where the regional transmission organization or independent system operator and the regional reliability

organization or regional entity has exactly the same geographic boundary, both may belong to this segment if they are separate entities.

**5.3 Segment 3 — Load-Serving Entities**

The following entities are eligible to join Segment 3.

5.3.1 Entities serving end-use customers under a regulated tariff, a contract governed by a regulatory tariff, or other legal obligation to serve.

5.3.2 A member of a generation and transmission cooperative or a joint-action agency may designate the generation and transmission cooperative or joint-action agency to represent it in this segment; such designation does not preclude the generation and transmission cooperative or joint-action agency from participation and voting in another segment representing its direct interests.

**5.4 Segment 4 — Transmission Dependent Utilities**

The following entities are eligible to join Segment 4: Entities with a regulatory, contract, or other legal obligation to serve wholesale aggregators or end-use customers, and that depend primarily on the transmission systems of third parties to provide this service. Agents or associations may represent groups of transmission dependent utilities.

**5.5 Segment 5 — Electric Generators**

The following entities are eligible to join Segment 5.

5.5.1 Affiliated and independent generators.

5.5.2 A company that sets up separate corporate, limited liability company or partnership entities for each one or two generating plants in which it is involved may only have one vote in this segment regardless of how many single-plant or two-plant entities the parent company has established or is involved in.

**5.6 Segment 6 — Electricity Brokers, Aggregators, and Marketers**

The following entities are eligible to join Segment 6.

5.6.1 Entities serving end-use customers under a power marketing agreement or other authorization not classified as a regulated tariff.

5.6.2 An entity that buys, sells, or brokers energy and related services for resale in wholesale or retail markets, whether a non-regulated



entity operating within its charter or an entity licensed by a governmental authority.

- 5.6.3 Generation and transmission cooperatives and joint-action agencies that perform an electricity broker, aggregator, or marketer function may belong to this segment.

**5.7 Segment 7 — Large Electricity End Users**

The following entities are eligible to join Segment 7.

- 5.7.1 Customers with at least one service delivery taken at 50 kV (radial supply or facilities dedicated to serve customers) that is not purchased for resale.
- 5.7.2 This segment also includes a single 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.
- 5.7.3 Agents or associations may represent groups of large end users.

**5.8 Segment 8 — Small Electricity Users**

The following persons or entities are eligible to join Segment 8.

- 5.8.1 A person or entity taking electric service exclusively below 50 kV.
- 5.8.2 A single customer 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.
- 5.8.3 Agents, state consumer advocates, or other advocate groups may represent groups of small customers.

**5.9 Segment 9 — Federal, State, and Provincial Regulators or other Government Entities**

Segment 9 includes federal, state, and provincial regulators and other government entities, including public utility commissions. This segment does not include federal power management agencies or the Tennessee Valley Authority.

**6. Review of Stakeholder Segment Entries**

NERC shall review all applications for joining the registered ballot body, and shall make a determination of whether the applicant's self-selection of a segment satisfies at least one of the guidelines to belong to that segment. The entity shall

then become eligible to participate as a voting member of that segment. The Standards Committee shall resolve disputes regarding eligibility for membership in a segment, with the applicant having the right of appeal to the board.

### **306. Standards Committee**

The Standards Committee shall provide oversight of the reliability standards development process to ensure stakeholder interests are fairly represented. The Standards Committee shall not under any circumstance change the substance of a draft or approved standard.

1. **Membership** — The Standards Committee is a representative committee comprising representatives of two members of each of the segments in the registered ballot body.
2. **Elections** — Standards Committee members are elected for staggered (one per segment per year) two-year terms by the respective stakeholder segments in accordance with the *Procedure for the Election of Members of the NERC Standards Committee*, which is incorporated into these rules as **Appendix 2**. Segments may use their own election procedure if such a procedure is ratified by two-thirds of the members of a segment and approved by the board.
3. **Canadian Representation**
  - 3.1 **Provision for Sufficient Canadian Representation** — If any regular election of Standards Committee members does not result in at least two Canadian members on the Standards Committee, the Canadian nominees who were not elected but who received the next highest percentage of votes within their respective segment(s) will be designated as additional members of the Standards Committee, as needed to achieve a total of two Canadian members.
  - 3.2 **Terms of Specially Designated Canadian Members** — Each specially designated Canadian member of the Standards Committee shall have a term ending with the next regulator annual election.
  - 3.3 **Segment Preference** — If any segment has an unfilled representative position on the Standards Committee following the annual election, the first preference is to assign each specially designated Canadian representative to a segment with an unfilled representative position for which his or her organization qualifies.
  - 3.4 **Rights of Specially Designated Canadian Members** — Any specially designated Canadian members of the Standards Committee shall have the same rights and obligations as all other members of the Standards Committee.
4. **Open Meetings** — All meetings of the Standards Committee shall be open and publicly noticed on the NERC Web site.

**307. Standards Process Manager**

NERC shall assign a standards process manager to administer the development of reliability standards. The standards process manager shall be responsible for ensuring that the development and revision of standards are in accordance with the NERC *Reliability Standards Development Procedure*. The standards process manager shall work to achieve the highest degree of integrity and consistency of quality and completeness of the reliability standards. The standards process manager shall coordinate with any regional entities that develop regional reliability standards to ensure those standards are effectively integrated with the NERC reliability standards.

**308. Essential Steps in the Development of Reliability Standards**

NERC shall develop reliability standards through the process set forth in the NERC *Reliability Standards Development Procedure* (**Appendix 1**). Any modifications or amendments to the reliability standards development procedure shall be consistent with the following minimum essential steps:

1. **Submit Request for a Standard** — Any member or committee of NERC or any member or committee of a regional reliability organization or regional entity, or any ERO governmental authority, may request (or, in the case of an ERO governmental authority, direct) that a reliability standard be developed, modified, or withdrawn. Additionally, any person or entity directly and materially affected by the reliability of the North American bulk power systems shall be allowed to request that a reliability standard be developed, modified, or withdrawn.
2. **Verify Consensus on Need and Justification for the Standard** —NERC shall publicly notice each valid request for a standard and request comment on the scope and justification for the standard. The Standards Committee will authorize development of the proposed standard if and when there is sufficient documented consensus of stakeholders on the scope and justification for the reliability standard. The requester may withdraw the request up until the time the standard is authorized for development.
3. **Provide Notice to ERO Governmental Authorities** — NERC shall notify each ERO governmental authority of each proposed standard requested and authorized for development. If development of a reliability standard or revision to a standard is directed by any ERO governmental authority, NERC shall within five (5) business days notify all other ERO governmental authorities, and shall within thirty (30) calendar days report to all ERO governmental authorities a plan and timetable for development or revision of the standard.
4. **Develop the Standard and Build Consensus for the Standard** —NERC shall appoint experts to draft the proposed reliability standard. All meetings of appointed drafting teams shall be open and publicly noticed on the NERC Web site. NERC shall publicly notice and request comment on each draft standard. NERC shall, within the scope of the approved request, revise the draft standard to reach consensus on the content of the standard.

5. **Field-test the Standard** — If the proposed reliability standard requires new methods or tools for implementation or to measure compliance, field-testing of the standard may be beneficial prior to approval of the standard. As applicable, NERC shall develop and implement field tests for proposed reliability standards.
6. **Form a Ballot Pool** — NERC shall establish a separate ballot pool for voting on each proposed reliability standard. To become eligible to vote on a proposed standard, members of the registered ballot body shall elect to enter the separate ballot pool.
7. **Approve the Standard** — Members of the registered ballot body that have joined a ballot pool shall be able to vote to approve the reliability standard through an electronic ballot, with equal weight given to the vote of each of the segments voting.
  - 7.1 **Quorum** — Approval of a proposed reliability standard or revision to a reliability standard shall require a quorum, which is established by at least three fourths of the members of the ballot pool submitting a response with an affirmative vote, a negative vote, or an abstention.
  - 7.2 **Approval Criteria** — Approval of a proposed reliability standard or revision to a reliability standard shall require approval by a two thirds majority affirmative vote, determined by equally weighting the vote of each of the registered ballot body segments in the ballot pool formed for such vote. The affirmative vote of a segment shall be the number of affirmative votes within the segment divided by the sum of the affirmative and negative votes within the segment, excluding abstentions and non-responses. Any segment for which no affirmative or negative votes are received shall not be included in the calculation of the weighted average vote of the segments (e.g., if only eight segments vote each segment voting receives one-eighth of the weight of the overall vote).
  - 7.3 **Urgent Action Approval Procedures** — The following modifications to the procedures specified in Section 308 shall be utilized to expedite the approval of reliability standards or revisions to reliability standards for which the board determines there is an urgent need for adoption more quickly than the normal procedures would allow.
    - 7.3.1 **Shortened Notice Period** — NERC shall publicly notice the proposed reliability standard or revision to reliability standard and shall provide a minimum comment period of 30 calendar days, before submitting the standard for a vote by the ballot pool.
    - 7.3.2 **One Year Duration** — Each reliability standard approved pursuant to the urgent action approval procedures shall expire within one year of its effective date. The effective date may be extended in yearly increments, if the extension is approved by vote

of the ballot pool, by the board and by applicable ERO governmental authorities, where authorized by applicable legislation or agreement.

- 7.4 **Board Approval** — Reliability standards or revisions to reliability standards approved by the ballot pool in accordance with Section 308.6.2 or 308.6.3 shall be submitted for approval by the board. No reliability standard or revision to a reliability standard shall be effective unless approved by the board.
- 7.5 **Governmental Approval** — After receiving board approval, a reliability standard or revision to a reliability standard shall be submitted for approval to any applicable ERO governmental authorities in accordance with Section 309. No reliability standard or revision to a reliability standard shall be effective within a geographic area over which an ERO governmental authority has jurisdiction unless approved by such ERO governmental authority.

### **309. Filing of Reliability Standards for Approval by ERO Governmental Authorities**

1. **Filing of Reliability Standards for Approval** — Where authorized by applicable legislation or agreement, NERC shall file with the applicable ERO governmental authorities each reliability standard, modification to a reliability standard, or withdrawal of a standard that is approved by the board, for approval of the action by each ERO governmental authority. Each filing shall be in the format required by the respective ERO governmental authorities and shall include: a concise statement of the basis and purpose of the standard; the text of the standard; the implementation plan for the reliability standard; a demonstration that the standard meets the essential attributes of reliability standards as stated in Section 302; the drafting team roster; the ballot pool and final ballot results; and a discussion of public comments received during the development of the reliability standard and the consideration of those comments.
2. **Remanded Reliability Standards and Directives to Develop Standards** — If an ERO governmental authority remands a reliability standard to NERC or directs NERC to develop a reliability standard, NERC shall within five (5) business days notify all other ERO governmental authorities, and shall within thirty (30) calendar days report to all ERO governmental authorities a plan and timetable for modification or development of the reliability standard. Standards that are remanded or directed by an ERO governmental authority shall be modified or developed using the *Reliability Standards Development Procedure*. NERC shall, during the development of a modification for the remanded standard or directed standard, consult with other ERO governmental authorities to coordinate any impacts of the proposed standards in those other jurisdictions. The urgent approval action procedure may be applied if necessary to meet a timetable for action required by the ERO governmental authorities.

### **310. Reliability Standards Annual Work Plan**

NERC shall develop and provide an annual work plan for development of reliability standards to the applicable ERO governmental authorities. NERC shall consider the comments and priorities of the ERO governmental authorities in developing and updating the work plan.

Each annual work plan shall include a progress report comparing results achieved to the prior year's plan.

### **311. Regional Entity Standards Development Procedures**

1. **NERC Approval of Regional Entity Reliability Standards Development Procedure** — To enable a regional entity to develop regional reliability standards that are to be recognized and made part of NERC reliability standards, a regional entity may request NERC to approve a regional entity reliability standards development procedure.
2. **Public Notice and Comment on Regional Reliability Standards Development Procedure** — Upon receipt of such a request, NERC shall publicly notice and request comment on the proposed regional standards development procedure, allowing a minimum of 45 days for comment. The regional entity shall have an opportunity to resolve any objections identified in the comments and may choose to withdraw the request, revise the procedure and request another posting for comment, or submit the procedure, along with its consideration of any objections received, for approval by NERC.
3. **Evaluation of Regional Reliability Standards Development Procedure** — NERC shall evaluate whether a regional reliability standards development procedure meets the criteria listed below and shall consider stakeholder comments, any unresolved stakeholder objections, and the consideration of comments provided by the regional entity, in making that determination. If NERC determines the regional reliability standards development procedure meets these requirements, the procedure shall be submitted to the board for approval. The board shall consider the recommended action, stakeholder comments, any unresolved stakeholder comments, and the regional entity consideration of comments in determining whether to approve the regional reliability standards development procedure.
  - 3.1 **Evaluation Criteria** — The regional reliability standards development procedure shall be:
    - 3.1.1 **Open** — The regional reliability standards development procedure shall provide that any person or entity who is directly and materially affected by the reliability of the bulk power systems within the regional entity shall be able to participate in the development and approval of reliability standards. There shall be no undue financial barriers to participation. Participation shall not be conditional upon membership in the regional entity, a regional entity or any organization, and shall not be unreasonably restricted on the basis of technical qualifications or other such requirements.

- 3.1.2 **Inclusive** — The regional reliability standards development procedure shall provide that any person with a direct and material interest has a right to participate by expressing an opinion and its basis, having that position considered, and appealing through an established appeals process if adversely affected.
  - 3.1.3 **Balanced** — The regional reliability standards development procedure shall have a balance of interests and shall not be dominated by any single interest category.
  - 3.1.4 **Due Process** — The regional reliability standards development procedure shall provide for reasonable notice and opportunity for public comment. At a minimum, the procedure shall include public notice of the intent to develop a standard, a public comment period on the proposed standard, due consideration of those public comments, and a ballot of interested stakeholders.
  - 3.1.5 **Transparent** — All actions material to the development of regional reliability standards shall be transparent. All standards development meetings shall be open and publicly noticed on the regional entity's Web site.
  - 3.1.6 **Accreditation of Regional Standards Development Procedure** — A regional entity's reliability standards development procedure that is accredited by the American National Standards Institute or the Standards Council of Canada shall be deemed to meet the criteria listed in this Section 311.3.1, although such accreditation is not a prerequisite for approval by NERC.
  - 3.1.7 **Use of NERC Procedure** — A regional entity may adopt the *NERC Reliability Standards Development Procedure* as the regional reliability standards development procedure, in which case the regional entity's procedure shall be deemed to meet the criteria listed in this Section 311.3.1.
- 4. **Revisions of Regional Reliability Standards Development Procedures** — Any revision to a regional reliability standards development procedure shall be subject to the same approval requirements set forth in Sections 311.1 through 311.3.
  - 5. **Duration of Regional Reliability Standards Development Procedures** — The regional reliability standards development procedure shall remain in effect until such time as it is replaced with a new version approved by NERC, or it is withdrawn by the regional entity. The regional entity may, at its discretion, withdraw its regional reliability standards development procedure at any time.

## **312. Variances From NERC Reliability Standards**

1. **Basis for Variances from NERC Reliability Standards** — Regional reliability organizations, regional entities, regional transmission organizations, market operators and other bulk power system owners, operators, and users may have valid justification to request approval for a variance from a NERC reliability standard. For example, there may be regulator-approved electricity market protocols or transmission tariffs that preclude meeting a reliability objective in the same manner as prescribed by a NERC reliability standard. There may also be a need for a variance based on physical differences in the electrical system.
  2. **Variances Must be Approved by NERC** — All variances from NERC reliability standards that are approved by NERC shall be made part of NERC reliability standards. No variances shall be permitted without approval of NERC. No regional entity or bulk power system owner, operator, or user shall claim an exemption to a NERC reliability standard without approval of such a variance through the applicable procedure.
  3. **Entity Variance That Applies to an Area Less Than a Regional Entity**— Any variance from a NERC reliability standard that is proposed to apply to one entity or a subset of entities within a limited portion of a regional entity, such as a variance that would apply to a regional transmission organization or particular market or to a subset of bulk power system owners, operators, or users, shall be approved through the regular standards development process defined in the NERC *Reliability Standards Development Procedure* and shall be made part of the applicable NERC reliability standard.
  4. **Regional Variance That Applies to a Regional Entity but Less Than an Interconnection** — Any regional variance from a NERC reliability standard that is proposed to apply for a regional entity, but not for an interconnection, shall be approved through the NERC *Reliability Standards Development Procedure*, except that only members of the registered ballot body located in the affected interconnection would be permitted to vote; and shall be made part of the NERC reliability standard.
  5. **Regional Variance That Applies to an Regional Entity on an Interconnection-wide Basis** — An interconnection-wide regional variance from a NERC reliability standard that is determined by NERC to be just, reasonable, and not unduly discriminatory or preferential, and in the public interest, and consistent with other applicable standards of governmental authorities shall be made part of the NERC reliability standard. NERC shall rebuttably presume that a regional variance from a NERC reliability standard that is developed, in accordance with a procedure approved by NERC, by a regional entity organized on an interconnection-wide basis, is just, reasonable, and not unduly discriminatory or preferential, and in the public interest. Rebuttal criteria defined in Section 313.3.1 may be applied to demonstrate otherwise.
- 313. Regional Reliability Standards Not Requiring Variances From NERC Reliability Standards**
1. **Basis for Regional Reliability Standards** — Regional entities may propose regional reliability standards that do not require variances from NERC reliability



standards. A variance would not be required, for instance, if the regional reliability standard does not conflict with or set less stringent requirements than any NERC reliability standard. In other words, the regional entity may set more stringent reliability requirements than the NERC reliability standard or cover matters not covered by an existing NERC reliability standard. Such regional reliability standards shall in all cases be approved by NERC and made part of the NERC reliability standards and shall be enforceable in accordance with the delegation agreement between NERC and the regional entity or other instrument granting authority over enforcement to the regional entity. No entities other than NERC and the regional entity shall be permitted to develop regional reliability standards that are enforceable under statutory authority delegated to NERC and the regional entity.

2. **Regional Reliability Standards That are Directed by a NERC Reliability Standard** — Although it is the intent of NERC to promote uniform reliability standards across North America, in some cases it may not be feasible, practical or economically justified to achieve a reliability objective with a reliability standard that is uniformly applicable across North America. In such cases, NERC may direct regional entities to develop regional reliability standards necessary to implement a NERC reliability standard. Such regional reliability standards that are developed pursuant to a direction by NERC shall be made part of the NERC reliability standards.
3. **Procedure for Developing an Interconnection-wide Regional Standard** — A regional entity organized on an interconnection-wide basis may propose a regional reliability standard for approval as a NERC reliability standard to be made mandatory for all applicable bulk power system owners, operators, and users within that interconnection.
  - 3.1 **Presumption of Validity** — An interconnection-wide regional reliability standard that is determined by NERC to be just, reasonable, and not unduly discriminatory or preferential, and in the public interest, and consistent with such other applicable standards of governmental authorities, shall be adopted as a NERC reliability standard. NERC shall rebuttably presume that a regional reliability standard developed, in accordance with a regional reliability standards development process approved by NERC, by a regional entity organized on an interconnection-wide basis, is just, reasonable, and not unduly discriminatory or preferential, and in the public interest, and consistent with such other applicable standards of governmental authorities. Criteria that may be applied to rebut this presumption are as follows:
    - 3.1.1 **Unfair or Closed Process** — The regional reliability standard was not developed in a fair and open process that provided an opportunity for all interested parties to participate. Although a NERC-approved regional reliability standards development procedure shall be presumed to be fair and open, objections could be raised regarding the implementation of the procedure.

- 3.1.2 **Adverse Reliability or Commercial Impact on Other Interconnections** — The regional reliability standard would have a significant adverse impact on reliability or commerce in other interconnections.
  - 3.1.3 **Deficient Standard** — The regional reliability standard fails to provide a level of reliability of the bulk power system within the interconnection, such that the regional reliability standard would be likely to cause a serious and substantial threat to public health, safety, welfare, or national security.
  - 3.1.4 **Adverse Impact on Competitive Markets within the Interconnection** — The regional reliability standard would create a serious and substantial burden on competitive markets within the interconnection that is not necessary for reliability.
- 3.2 **Notice and Comment Procedure for Interconnection-wide Regional Reliability Standard** — NERC shall publicly notice and request comment on the proposed interconnection-wide regional reliability standard, allowing a minimum of 45 days for comment. Comment shall be permitted only on the criteria stated in Section 313.3.1. NERC may publicly notice and post for comment the proposed regional reliability standard concurrent with similar steps in the regional entity’s reliability standards development process. The regional entity shall have an opportunity to resolve any objections identified in the comments and may choose to comment on or withdraw the request, revise the proposed regional reliability standard and request another posting for comment, or submit the proposed regional reliability standard along with its consideration of any objections received, for approval by NERC.
- 3.3 **Approval of Interconnection-wide Regional Reliability Standard by NERC** — NERC shall evaluate and recommend whether a proposed interconnection-wide regional reliability standard has been developed in accordance with all applicable procedural requirements and whether the regional entity has considered and resolved stakeholder objections that could serve as a basis for rebutting the presumption of validity of the regional reliability standard. The regional entity, having been notified of the results of the evaluation and recommendation concerning NERC proposed regional reliability standard, shall have the option of presenting the proposed regional reliability standard to the board for approval as a NERC reliability standard. The board shall consider the regional entity’s request, NERC’s recommendation for action on the regional reliability standard, any unresolved stakeholder comments, and the regional entity’s consideration of comments, in determining whether to approve the regional reliability standard as a NERC reliability standard.

- 3.4 **ERO Governmental Authority Approval** — An interconnection-wide regional reliability standard that has been approved by the board shall be filed with the applicable ERO governmental authorities for approval, where authorized by applicable legislation or agreement, and shall become effective when approved by such ERO governmental authorities or on a date set by the ERO governmental authorities.
- 3.5 **Enforcement of Interconnection-wide Regional Reliability Standard** — An interconnection-wide regional reliability standard that has been approved by the board and by the applicable ERO governmental authorities or is otherwise accepted as mandatory within a particular region shall be applicable and enforced as a NERC reliability standard within the region.

4. **Procedure for Developing Non-Interconnection-Wide Regional Reliability Standards**

Regional entities that are not organized on an interconnection-wide basis may propose regional reliability standards to apply within their respective regions. Such standards may be developed through the NERC reliability standards development procedure, or alternatively, through a regional reliability standards development procedure that has been approved by NERC.

- 4.1 **No Presumption of Validity** — Regional reliability standards that are not proposed to be applied on an interconnection-wide basis are not presumed to be valid but may be demonstrated by the proponent to be valid in accordance with the following criteria:
  - 4.1.1 **No Adverse Impact on Reliability of the Interconnection** — The regional reliability standard provides a level of bulk power system reliability that is adequate to protect public health, safety, welfare, and national security and would not have an adverse impact on the reliability of the interconnection or other regions within the interconnection.
  - 4.1.2 **Justifiable Difference** — The regional reliability standard is based on justifiable differences between regions, such as different electrical systems characteristics.
  - 4.1.3 **No Adverse Impact on Commerce** — The regional reliability standard would not cause an adverse impact on commerce that is not necessary for reliability.
  - 4.1.4 **Fair and Open Procedure** — The regional reliability standard was developed in conformance with NERC *Reliability Standards Development Procedure* or in conformance with the regional entity reliability standards development procedure which has been approved by NERC.

- 4.2 **Notice and Comment Procedure for Noninterconnection-wide Regional Reliability Standards** —NERC shall publicly notice and request comment on the proposed regional reliability standard, allowing a minimum of 45 days for comment. NERC may publicly notice and post for comment the proposed regional reliability standard concurrent with similar steps in the regional entity’s reliability standards development process. The regional entity shall have an opportunity to comment on or resolve any objections identified in the comments and may choose to withdraw the request, revise the proposed regional reliability standard and request another posting for comment, or submit the proposed regional reliability standard along with its consideration of any objections received, for approval by NERC.
- 4.3 **NERC Approval of Noninterconnection-wide Regional Reliability Standards** —NERC shall evaluate and recommend whether a proposed noninterconnection-wide regional reliability standard has been developed in accordance with all applicable procedural requirements and whether the regional entity has considered and resolved stakeholder objections. The regional entity, having been notified of the results of the evaluation and recommendation concerning proposed regional reliability standard, shall have the option of presenting the proposed regional reliability standard to the board for approval as a NERC reliability standard. The board shall consider the regional entity’s request, the recommendation for action on the regional reliability standard, any unresolved stakeholder comments, and the regional entity’s consideration of comments, in determining whether to approve the regional reliability standard as a NERC reliability standard.
- 4.4 **NERC Governmental Authority Approval** — A noninterconnection-wide regional reliability standard that has been approved by the board shall be filed with the applicable ERO governmental authorities for approval, where authorized by applicable legislation or agreement, and shall become effective when approved by such ERO governmental authorities or on a date set by the ERO governmental authorities.
- 4.5 **Enforcement of Noninterconnection-wide Regional Reliability Standards** — A noninterconnection-wide regional reliability standard that has been approved by the board and by the applicable ERO governmental authorities or is otherwise accepted as mandatory within a particular region shall be applicable and enforced as a NERC reliability standard within the region.

**314. Other Regional Criteria, Guides, Procedures, Agreements, Etc.**

1. **Regional Criteria** — Regional entities may develop regional criteria that are necessary to implement, to augment, or to comply with reliability standards, but which are not reliability standards. Regional criteria may also address issues not within the scope of reliability standards, such as resource adequacy. Regional

criteria may include specific acceptable operating or planning parameters, guides, agreements, protocols or other documents used to enhance the reliability of the regional bulk power system. These documents typically provide benefits by promoting more consistent implementation of the NERC reliability standards within the region. These documents are not NERC reliability standards, regional reliability standards, or regional variances, and therefore are not enforceable under authority delegated by NERC pursuant to delegation agreements and do not require NERC approval.

2. **Catalog of Regional Reliability Criteria** — NERC shall maintain a current catalog of regional reliability criteria. Regional reliability organizations and regional entities shall provide a catalog listing of regional reliability criteria to NERC and shall notify NERC of changes to the listing. Regional reliability organizations and regional entities shall provide any listed document to NERC upon written request.

### **315. Conflicts with Statutes, Regulations, and Orders**

**Notice of Potential Conflict** — If a bulk power system owner, operator, or user determines that a NERC or regional reliability standard may conflict with a function, rule, order, tariff, rate schedule, legislative requirement or agreement that has been accepted, approved, or ordered by a governmental authority affecting that entity, the entity shall expeditiously notify the governmental authority, NERC, and the relevant regional entity of the conflict.

1. **Determination of Conflict** — NERC, upon request of the governmental authority, may advise the governmental authority regarding the conflict and propose a resolution of the conflict, including revision of the reliability standard if appropriate.
2. **Regulatory Precedence** — Unless otherwise ordered by a governmental authority, the affected bulk power system owner, operator, or user shall continue to follow the function, rule, order, tariff, rate schedule, legislative requirement, or agreement accepted, approved, or ordered by the governmental authority until the governmental authority finds that a conflict exists and orders a remedy and such remedy is affected.

### **316. Revisions to NERC Reliability Standards Development Procedure**

Any person or entity may submit a written request to modify NERC *Reliability Standards Development Procedure*. Consideration of the request and development of the revision shall follow the process defined in the NERC *Reliability Standards Development Procedure*. Upon approval by the board, the revision shall be submitted to the ERO governmental authorities for approval. Changes shall become effective only upon approval by the ERO governmental authorities or on a date designated by the ERO governmental authorities or as otherwise applicable in a particular jurisdiction.

### **317. Accreditation**

NERC shall seek continuing accreditation of the NERC reliability standards development process by the American National Standards Institute and the Standards Council of Canada.

**318. Five-Year Review of Standards**

NERC shall complete a review of each NERC reliability standard at least once every five years from the effective date of the standard or the latest revision to the standard, whichever is later. The review process shall be conducted in accordance with the *NERC Reliability Standards Development Procedure*. The standards process manager shall be responsible for administration of the five-year review of reliability standards. As a result of this review, the NERC reliability standard shall be reaffirmed, revised, or withdrawn. If the review indicates a need to revise or withdraw the standard, a request for revision or withdrawal shall be prepared, submitted and addressed in accordance with the *NERC Reliability Standards Development Procedure*.

**319. Coordination with the North American Energy Standards Board**

NERC shall, through a memorandum of understanding, maintain a close working relationship with the North American Energy Standards Board and ISO/RTO Council to ensure effective coordination of wholesale electric business practice standards and market protocols with the NERC reliability standards.

**320. Archived Standards Information**

NERC shall maintain a historical record of reliability standards information that is no longer maintained on-line. For example, standards that expired or were replaced may be removed from the on-line system. Archived information shall be retained indefinitely as practical, but in no case less than five years or one complete standards review cycle from the date on which the standard was no longer in effect. Archived records of reliability standards information shall be available electronically within 30 days following the receipt by the standards process manager of a written request.

## **SECTION 400 — COMPLIANCE ENFORCEMENT**

### **401. Scope of the NERC Compliance Enforcement Program**

1. **Components of the NERC Compliance Enforcement Program** — NERC shall develop and implement a NERC Compliance Enforcement Program to promote the reliability of the bulk power system by enforcing compliance with approved reliability standards in those regions of North American in which NERC and/or an regional entity has been given enforcement authority. There shall be four distinct parts of the NERC Compliance Enforcement Program: (1) NERC’s oversight of the regional entity compliance programs (Section 402), (2) the definition of the required regional entity compliance enforcement program attributes (Section 403), (3) NERC’s monitoring of regional entity compliance with reliability standards (Section 404), and (4) the monitoring of compliance with reliability standards that are applicable to NERC (Sections 405–406).
2. **Who Must Comply** — All bulk power system owners, operators, and users, and in some cases regional reliability organizations, regional entities, and NERC, are required to comply with all approved NERC reliability standards at all times. Regional reliability standards and regional variances approved by NERC shall be considered NERC reliability standards and shall apply to all bulk power system owners, operators, or users responsible for meeting those standards within the regional entity boundaries, whether or not the bulk power system owner, operator, or user is a member of the regional entity.
3. **Data Access** — All bulk power system owners, operators, and users shall provide to NERC and the applicable regional entity such information as is necessary to monitor compliance with the reliability standards. NERC and the applicable regional entity will define the data retention and reporting requirements in the reliability standards and compliance reporting procedures.
4. **Role of Regional Entities in the Compliance Enforcement Program** — Each regional entity that has been delegated authority through a delegation agreement or other legal instrument shall administer a regional entity compliance enforcement program to meet the NERC Compliance Enforcement Program goals and the requirements in this Section 400.
5. **Program Continuity** — NERC shall have a plan to ensure continuity of compliance monitoring and enforcement within the geographic boundaries of a regional entity in the event that NERC does not have a delegation agreement, or the regional entity withdraws from the agreement or does not operate its compliance enforcement program in accordance with the delegation agreement or other applicable requirements.
6. **Actively Monitored Requirements** — NERC, with input from the regional entities, stakeholders, and regulators, shall annually select a subset of the NERC reliability standards and requirements to be actively monitored and audited in the NERC annual compliance program. Compliance is required with all NERC reliability standards whether or not they are included in the subset of reliability

standards and requirements designated to be actively monitored and audited in the NERC annual compliance program.

7. **Penalties, Sanctions, and Remedial Actions** — NERC and regional entities will apply penalties, sanctions, and remedial actions that bear a reasonable relation to the seriousness of a violation and take into consideration timely remedial efforts as defined in the *ERO Sanction Guidelines*.
8. **Records** — NERC shall maintain a record of each compliance submission, including self-reported, confirmed, and alleged violations of approved reliability standards; associated penalties, sanctions, remedial actions and settlements; and the status of mitigation actions.

#### **402. NERC Oversight of the Regional Entity Compliance Enforcement Programs**

1. **NERC Monitoring Program** — NERC shall have a program to monitor the compliance enforcement program of each regional entity that has been delegated authority. The objective of this monitoring program shall be to ensure that the regional entity carries out its compliance enforcement program in accordance with these rules and the terms of the delegation agreement, and to ensure consistency and fairness of regional entity compliance enforcement program. Oversight by NERC shall be accomplished through an annual compliance enforcement program review, program audits, and regular evaluations of regional entity compliance enforcement program performance.
2. **NERC Review of Regional Compliance Enforcement Programs Annual Plan** — NERC shall review each regional entity's compliance enforcement program annual implementation plan and shall accept the plan if it meets NERC requirements and the requirements of the delegation agreement.
3. **Consistency Among Regional Compliance Enforcement Programs** — To provide a consistent compliance enforcement program for each bulk power system owner, operator, or user subject to approved reliability standards, NERC shall maintain consistency among the regional entity compliance enforcement programs. Differences in regional entity program methods, including determination of violations and penalty assessment, shall be justified on a case-by-case basis and fully documented.
  - 3.1 NERC shall ensure that each of the regional entity compliance enforcement programs meets these rules and follows the terms of the delegation agreement and the approved regional entity compliance enforcement program annual plan.
  - 3.2 NERC shall develop procedures to ensure the consistency and fairness of the processes used to determine regional entity compliance enforcement program findings of compliance and noncompliance, and the application of penalties and sanctions.
  - 3.3 NERC shall periodically conduct regional compliance manager forums. These forums shall use the results of regional compliance program audits



and findings of NERC compliance staff to identify and refine regional compliance program differences into a set of best practices over time.

4. **Information Collection and Reporting** — NERC and the regional entities shall have data management procedures that address data reporting requirements, data integrity, data retention, data security, and data confidentiality.
5. **Violation Disclosure** —NERC shall disclose all confirmed violations and maintain as confidential alleged violations, according to the reporting and disclosure process in Section 408. Due process shall be afforded to bulk power system owners, operators, and users through Sections 409–411.
6. **Authority to Determine Noncompliance, Levy Penalties and Sanctions, Issue Compliance Directives, and Order Remedial Actions** —NERC and regional entity compliance staff shall have the authority and responsibility to make initial determinations of compliance or noncompliance, and where authorized by the appropriate governmental authorities or where otherwise authorized, to determine penalties and sanctions for noncompliance with a reliability standard, and issue compliance directives or other remedial actions. Regional entity boards or a compliance panel reporting directly to the regional entity board will be vested with the authority for the overall regional program and granted the ability to impose penalties and sanctions on behalf of NERC, where authorized by applicable legislation or agreement. Compliance directives may be issued by NERC or a regional entity that is aware of a bulk power system owner, operator, or user that is about to engage in an act or practice that would result in noncompliance. If, after receiving such a directive, the bulk power system owner, operator, or user does not take appropriate action to avert a violation of a reliability standard, NERC may petition the applicable governmental authority to issue a compliance order.
7. **Due Process** —NERC shall establish and maintain a fair, independent, and nondiscriminatory appeals process. The appeals process is set forth Sections 409–411. The process shall allow bulk power system owners, operators, and users to appeal the regional entity’s findings of noncompliance and to appeal penalties, sanctions, and remedial actions that are levied by the regional entity. Appeals beyond the NERC process will be heard by the applicable governmental authority.

The appeals process will also allow for appeals to NERC any findings of noncompliance issued by NERC to a regional reliability organization for standards and requirements where the regional reliability organization is monitored for compliance to a reliability standard. No monetary penalties will be levied in these matters; however sanctions, remedial actions, and directives to comply may be applied by NERC.

8. **Conflict Disclosure** — NERC shall disclose to the appropriate governmental authorities any potential conflicts between a market rule and the enforcement of a regional reliability standard.

9. **Confidentiality** — To maintain the integrity of the NERC Compliance Enforcement Program, NERC and regional entity staff, audit team members, and committee members shall maintain the confidentiality of information shared during investigations, audits, drafting of reports, appeals, and closed meetings.
  - 9.1 NERC and the regional entity shall have in place appropriate codes of conduct and confidentiality agreements for staff and other compliance enforcement program participants.
  - 9.2 Individuals not bound by NERC or regional entity codes of conduct who serve on compliance-related committees or audit teams shall sign a NERC confidentiality agreement prior to participating on the committee or team.
  - 9.3 Information deemed by a bulk power system owner, operator, or user, regional entity, or NERC as critical energy infrastructure information (*NERC Security Guidelines for the Electricity Sector — Protecting Potentially Sensitive Information* may be used as a guide) shall not be distributed outside of a committee or team, nor released publicly. Other information subject to confidentiality is identified in Section 408.
  - 9.4 In the event that a staff, committee, or audit team member violates the intent of the principle or any of the confidentiality rules set forth above, the staff, committee, or audit team member and any member organization with which the individual is associated may be subject to appropriate action by the regional entity or NERC, including prohibiting participation in future compliance enforcement activities.
10. **Regional Entity Program Evaluation** — NERC shall annually evaluate the goals, tools, and procedures of each regional entity compliance enforcement program to determine the effectiveness of each regional entity program, using criteria developed by a NERC compliance committee of stakeholders.
11. **Regional Entity Program Audit** — At least once every three years, NERC shall conduct an audit to evaluate how each regional entity compliance enforcement program implements the NERC Compliance Enforcement Program. The evaluation shall be based on these rules of procedures, the delegation agreement, approved program annual plans, required program attributes, and the NERC compliance program procedures. These evaluations shall be provided to the appropriate governmental authorities to demonstrate the effectiveness of each regional entity.
  - 11.1 NERC shall maintain an audit procedure containing the requirements, steps, and timelines to conduct an audit of each regional entity compliance enforcement program. The current procedure is contained in the NERC *Audit of Regional Entity Compliance Programs*, which is incorporated into these rules as **Appendix 3**.

- 11.2 NERC shall establish a program to audit bulk power system owners, operators, and users operating within a regional entity to verify the findings of previous compliance audits conducted by the regional entity to evaluate how well the regional entity compliance enforcement program is meeting its delegated authority and responsibilities.
  - 11.3 ERO governmental authorities will be allowed to participate in an audit as an observer. A regional entity representative will be allowed to participate.
12. **Auditor Training** — NERC shall develop and provide training in auditing skills to all people who participate in NERC and regional entity compliance enforcement audits. Training for NERC and regional entity personnel and others who serve as compliance audit team leaders shall be more comprehensive than training given to industry experts, regional entity members, and volunteers. Training for regional entity members and volunteers may be delegated to the regional entity.

#### **403. Required Attributes of Regional Entity Compliance Enforcement Programs**

Each regional entity compliance enforcement program shall promote excellence in the enforcement of reliability standards. To accomplish this goal, each regional entity compliance enforcement program shall at a minimum meet all of the following attributes.

##### **Program Structure**

1. **Independence** — Each regional entity's governance of its compliance enforcement program shall exhibit independence, meaning the compliance enforcement program shall be organized so that its compliance monitoring and enforcement activities are carried out separately from other activities of the regional entity. The program shall not be unduly influenced by the bulk power system owners, operators, and users being monitored or other regional entity or regional reliability organization activities that are required to meet the reliability standards.
2. **Exercising Authority** — Each regional entity compliance enforcement program shall exercise the responsibility and authority in carrying out the delegated functions of the NERC Compliance Enforcement Program in accordance with delegation agreements. These functions include but are not limited to: data gathering, data reporting, investigations, auditing activities, evaluating compliance and noncompliance, imposing penalties and sanctions, and approving and tracking mitigation actions.
3. **Delegation of Authority** — To maintain independence, fairness, and consistency in the NERC Compliance Enforcement Program, each regional entity compliance enforcement program shall not sub-delegate those duties to entities or persons other than the regional entity compliance enforcement program staff, unless required by statute or regulation in the applicable jurisdiction.

4. **Hearings of Contested Findings or Sanctions** — The regional entity board or compliance panel reporting directly to the regional entity board (with appropriate recusal procedures) will be vested with the authority for conducting compliance hearings in which any bulk power system owner, operator, or user provided notice of an alleged violation may request to present facts and other information to contest a finding of an alleged violation or any penalty, sanction, or remedial action applied.

**Program Resources**

5. **Regional Entity Compliance Staff** — Each regional entity shall have sufficient resources to meet delegated compliance enforcement responsibilities, including the necessary professional staff, to manage and implement the regional entity compliance enforcement program.
6. **Regional Entity Compliance Staff Independence** — The regional entity compliance enforcement program staff shall be capable of and required to make all initial determinations of compliance and noncompliance and determine penalties, sanctions, and remedial actions.
  - 6.1 Regional entity compliance enforcement program staff shall not have a conflict of interest, real or perceived, in the outcome of their investigations, evaluations, reports, or sanctions. The regional entity shall have in effect a conflict of interest policy.
  - 6.2 Regional entity compliance enforcement program staff shall have the authority and responsibility to investigate, audit (with the input of industry experts or regional members), make initial determinations of compliance or noncompliance, and levy penalties and sanctions without interference or undue influence from regional entity members and their representative or other industry entities.
  - 6.3 Regional entity compliance enforcement program staff may call upon independent technical experts who have no conflict of interest in the outcome of the investigation or audit to provide technical advice or recommendations in the determination of compliance or noncompliance in audits, investigations, or review of self-reported violations.
  - 6.4 Regional entity compliance enforcement program staff shall abide by the confidentiality requirements contained in the NERC delegation agreement and other confidentiality agreements required by the NERC Compliance Enforcement Program.
  - 6.5 Contracting with independent consultants or others working for the regional entity compliance enforcement program shall be permitted provided the individual has not received compensation from a bulk power system owner, operator, or user being monitored for a period of at least the preceding six months and owns no financial interest in any bulk power system owner, operator, or user being monitored for compliance to the reliability standard, regardless of where the bulk power system owner,

operator, or user operates. Any such individuals for the purpose of these rules shall be considered as augmenting regional entity compliance staff.

7. **Use of Industry Experts and Regional Entity Members** — Industry experts and regional entity members may be called upon to provide their technical expertise in investigations, audits, and other compliance activities.
  - 7.1 The regional entity shall have procedures defining the allowable involvement of industry experts and regional entity members. The procedures shall address applicable antitrust laws and conflicts of interest.
  - 7.2 Industry experts and regional entity members shall have no conflict of interest or financial interests in the outcome of their activities.
  - 7.3 Regional entity members and volunteers, as part of teams or regional entity committees, may provide input to the regional entity compliance staff so long as the authority and responsibility for (i) initially evaluating compliance or noncompliance and (ii) levying penalties, sanctions, or remedial actions shall not be delegated to any person or entity other than the compliance staff of the regional entity. Industry experts, regional entity or regional reliability organization members, or committees shall not make initial determinations of noncompliance or levy penalties, sanctions, or remedial actions.
  - 7.4 Industry experts, regional entity, and regional reliability organization members shall sign a confidentiality agreement appropriate for the activity being performed.
  - 7.5 All industry experts and regional entity members participating in audits and investigations shall successfully complete auditor training provided by NERC or the regional entity prior to performing these activities

### **Program Design**

8. **Regional Entity Compliance Enforcement Program Content** — All approved reliability standards shall be included in the regional entity compliance enforcement program for all bulk power system owners, operators, and users within the defined boundaries of the regional entity. Compliance to approved regional entity reliability standards is applicable only within the footprint of the regional entity that submitted those particular regional entity reliability standards for approval. NERC will identify the minimum set of reliability standards and requirements to be actively monitored by the regional entity in a given year.
9. **Antitrust Provisions** — Each regional entity's compliance enforcement program shall be structured and administered to abide by U.S. antitrust law and Canadian competition law.
10. **Information Submittal** — All bulk power system owners, operators, and users within the regional entity responsible for complying with reliability standards shall submit timely and accurate information when requested by the regional

entity or NERC, in accordance with established procedures of NERC and the regional entity.

- 10.1. Each regional entity has the authority to collect the necessary information to determine compliance and shall develop processes for gathering data from the bulk power system owners, operators, and users they monitor.
  - 10.2. When requested, the regional entities shall report information to NERC promptly and in accordance with NERC procedures.
  - 10.3. Regional entities shall notify NERC of all violations of NERC reliability standards by entities over which the regional entity has enforcement authority or enforcement responsibilities, whether self-reported, alleged, or confirmed, in accordance with the *Reporting and Disclosure Process* in Section 408.
  - 10.4. A bulk power system owner, operator, or user found in noncompliance with a reliability standard shall submit a mitigation plan with a timeline addressing how the noncompliance will be corrected. The regional entity compliance staff shall review and approve the mitigation plan. Regional entity compliance staff may issue directives to comply with standards, as needed to preserve the reliability of the bulk power system.
  - 10.5. An officer of a bulk power system owner, operator, or user shall certify as accurate all compliance data self-reported to the regional entity compliance enforcement program.
  - 10.6. Regional entities shall develop and implement procedures to spot-check and verify the compliance information submitted by bulk power system owners, operators, and users.
11. **Compliance Audits of Bulk power system owners, operators, and users** — Each regional entity will maintain a program of proactive enforcement audits. The regional entity shall audit each bulk power system owner, operator, or user responsible for complying with reliability standards. A compliance audit is a process in which a detailed review of a bulk power system owner, operator, or user is performed to determine if that bulk power system owner, operator, or user is complying with approved reliability standards.
- 11.1 For those bulk power system owners and operators with primary reliability responsibility (i.e., entities requiring organization certification), the compliance audit will be performed at least once every three years. For other registered bulk power system owners, operators, and users, audits shall be performed on a schedule established by NERC.
  - 11.2 Audits of bulk power system owners and operators with primary reliability responsibility will be performed on the audited entity's site. For other registered bulk power system owners, operators, and users, the audit may

include a tabletop type audit or an on-site audit if deemed necessary by NERC or regional entity staff.

11.3 Compliance audits must include a detailed review of a bulk power system owner, operator, or user to determine if that bulk power system owner, operator, or user is complying with all approved reliability standards identified for audit by NERC by reviewing supporting documentation and evidence used for self-certification compliance reporting for an appropriate reporting period since the last compliance audit.

11.4 NERC compliance staff may participate on any regional entity audit team, at any time at NERC's discretion. Additionally, any applicable governmental authority may participate on an audit team as an observer in any regional entity audit within its jurisdiction, at the authority's discretion subject to limitations on audit team size.

12. **Compliance Audit Results** — The regional entity shall make an evaluation of a bulk power system owner's, operator's, or user's compliance based on the information obtained from an audit and previously reported compliance information. After due process is complete, this evaluation (excluding any critical energy infrastructure information) shall be made public. The regional entity shall send the report to NERC for public posting.

13. **Investigations** — Investigations are necessary to evaluate compliance with reliability standards when certain system events occur, or when other owners, operators, or users of the bulk power system file complaints. NERC is ultimately responsible for how a regional entity conducts investigations. Investigations are initiated at the discretion of the regional entity compliance enforcement program staff, the senior executive officer of the regional entity, NERC compliance staff, or the NERC president. The regional entity shall respond to any complaints filed by one entity against another that if that entity alleges a violation of reliability standards by a bulk power system owner, operator, or user. The regional entity may ask NERC to assist with the investigation. Situations that can trigger an investigation include but are not limited to (i) significant problems arising on the system, (ii) chronic noncompliance violations, (iii) bulk power system owners, operators, and users not submitting data in a timely or accurate manner, (iv) probable violations identified during readiness audits, (v) spot-checks to verify submitted data, (vi) filing of a valid compliance complaint with the regional entity or NERC, or (vii) Nuclear Regulatory Commission-defined incidents occurring on the transmission system.

All investigations are to be non-public unless NERC or regional entity determines a need to conduct a public investigation. For all public investigations, enforcement audit, or permit interventions when determining whether to impose a penalty, advance authorization from the applicable governmental authority is required.

14. **Report all Violations** — Each regional entity compliance enforcement program shall report to NERC all violations whether self-reported, alleged, or discovered by the region through an audit or investigation of all approved reliability standards in accordance with the *Reporting and Disclosure Process* in Section 408. The regional entity will promptly notify NERC of any change in the status of a violation and provide updates at least monthly regarding the status of any audits, investigations, or hearings.
15. **Critical Energy Infrastructure Information** — Information deemed by a bulk power system owner, operator, or user, regional entity, or NERC as critical energy infrastructure information (*NERC Security Guidelines for the Electricity Sector — Protecting Potentially Sensitive Information* may be used as a guide) shall be redacted according to NERC procedures and shall not be released publicly.
16. **Penalties, Sanctions, and Remedial Actions** — Each regional entity will apply all penalties, sanctions, and remedial actions, including compliance directives, in accordance with the approved *ERO Sanction Guidelines*. Any changes to the *ERO Sanction Guidelines* to be used by any regional entity must be approved NERC and submitted to the appropriate governmental body for approval. All penalties, sanctions, and remedial actions, including compliance directives, will be provided to NERC for review and filing with applicable governmental authorities as a notice of penalty.
17. **Mitigation of Violations** — Each regional entity compliance enforcement program will require that any bulk power system owner, operator, or user found in noncompliance to a reliability standard requirement shall submit a mitigation plan with a timeline addressing how the noncompliance will be corrected. The mitigation plan shall be reviewed and approved by the regional compliance staff and the regions compliance panel or board as appropriate.
18. **Settlement Processes** — Each regional entity may enter into a settlement process for alleged violations of a reliability standard and any associated financial penalty, sanction, or mitigation actions. NERC must be notified of all settlement proceedings and may participate in any settlement processes. Regional entities may consider all relevant facts in the settlement. Any settlement must ensure that the reliability of the bulk power system will not be compromised by entering into a settlement and that a violation of reliability standards will not occur as a result of the settlement. All settlements must be reported to NERC, which will in turn report the settlement of an alleged violation to the Federal Energy Regulatory Commission or the applicable governmental authority. NERC shall publicly post each violation settled, whether confirmed or not, and the resulting penalty or sanction.
19. **Regional Hearing Process** — Each regional entity compliance enforcement program shall establish and maintain a fair, independent, and nondiscriminatory process for hearing contested violations and any penalties or sanctions levied where authorized by applicable legislation or agreement. The hearing process shall allow bulk power system owners, operators, and users to contest both findings of compliance violations and any penalties and sanctions that are levied.



The regional entity hearing process shall culminate with the regional entity board or a balanced committee established by the regional entity board as the final adjudicator, provided, that (i) in ERCOT, the Public Utility Commission of Texas may act as the final adjudicator, and (ii) Canadian provincial regulators may act as the final adjudicator in their respective jurisdictions.

Each regional entity will notify NERC of all hearings and NERC may observe any of the proceedings. Each regional entity will notify NERC of the outcome of all hearings processes.

Once a bulk power system owner, operator, or user has completed the regional entity hearing process and desires to continue appeals, the bulk power system owner, operator, or user shall appeal to NERC, except that a determination of violation or penalty that has been directly adjudicated by a governmental authority shall be appealed with that governmental authority.

20. **Annual Regional Entity Compliance Enforcement Program Implementation Plan** — Each regional entity shall annually develop and submit to NERC for approval a regional entity compliance enforcement implementation plan that identifies the reliability standards and requirements to be actively monitored in addition to those required by NERC, and how each NERC and regional entity identified standard will be monitored, evaluated, reported, sanctioned, and appealed.

11.1 In conjunction with the annual program implementation plan, each regional entity with delegated authority must report to NERC regarding how it carried out its delegated enforcement authority in the previous year, the effectiveness of the program, and changes expected to correct any deficiencies identified.

**404. NERC Monitoring of Regional Entity or Regional Reliability Organization Compliance**

NERC shall monitor regional entity or regional reliability organization compliance with NERC reliability standards. Industry experts may be used as appropriate in investigations, audits, and other compliance activities, subject to confidentiality, antitrust, and conflict of interest provisions.

1. **NERC Obligations** — NERC compliance enforcement staff shall monitor the compliance of the regional entity or regional reliability organization with the reliability standards for which the regional entities or regional reliability organizations are responsible. NERC shall actively monitor in its annual compliance enforcement program selected reliability standards that apply to the regional entities or regional reliability organizations. NERC shall evaluate compliance and noncompliance with all of the reliability standards that apply to the regional entities or regional reliability organizations and apply sanctions, remedial actions, or directives to comply when there is a finding of noncompliance. NERC shall post all violations to reliability standards that apply

to the regional entities or regional reliability organizations as described in the reporting and disclosure process in Section 408.

2. **Mitigation Plans** — A regional entity or regional reliability organization found in noncompliance with a reliability standard shall submit a mitigation plan with a timeline addressing how the noncompliance will be corrected for NERC approval.
3. **Compliance Audit of the Regional Entity or Regional Reliability Organization** — NERC shall perform a compliance audit of each regional entity or regional reliability organization responsible for complying with reliability standards at least once every three years. NERC shall make an evaluation of compliance based on the information obtained through the audit. After due process is complete, the final audit report shall be made public in accordance with the reporting and disclosure process in Section 408.
4. **Appeals Process** — Sections 409–411 shall be the means for regional entities or regional reliability organizations to appeal findings of noncompliance with reliability standards and any sanctions, remedial actions, or directives to comply that are issued by NERC.

#### **405. Monitoring of Compliance Standards Applicable to NERC**

A NERC stakeholder compliance committee shall establish and implement a process to monitor NERC's compliance with the reliability standards that apply to NERC. The process shall use independent monitors with no conflict of interest, real or perceived, in the outcomes of the process. All violations shall be made public according to the reporting and disclosure process in Section 408.

#### **406. Independent Audits of the NERC Compliance Enforcement Program**

NERC shall provide for an independent audit of its compliance enforcement program at least once every three years, or more frequently as determined by the board. The audit shall be conducted by independent expert auditors as selected by the board. The independent audit shall meet the following minimum requirements and any other requirements established by the NERC board.

1. **Effectiveness** — The audit shall evaluate the success and effectiveness of the NERC Compliance Enforcement Program in achieving its mission.
2. **Relationship** — This audit shall evaluate the relationship between NERC and the regional entity compliance enforcement programs and the effectiveness of the programs in ensuring reliability.
3. **Final Report Posting** — The final report shall be posted by NERC for public viewing according to the reporting and disclosure process in Section 408.
4. **Response to Recommendations** — If the audit report includes recommendations to improve the NERC Compliance Enforcement Program, the administrators of

the NERC Compliance Enforcement Program shall provide a written response and plan to the board within 30 days of the release of the final audit report.

**407. Penalties, Sanctions, and Remedial Actions**

1. **NERC Review of Regional Penalties and Sanctions** — NERC shall review penalties and sanctions levied by each regional entity for violations of reliability standards (including a penalty or sanction that (i) exceeds a NERC established monetary value, or (ii) includes mitigating or aggravating factors) for consistency with similar violations and fairness in application.
2. **Developing Penalties and Sanctions** — The regional entity compliance enforcement program staff shall use the *ERO Sanction Guidelines*, which are incorporated into these rules as **Appendix 4**, to develop an appropriate penalty, sanction, or remedial action for a violation, and shall notify NERC of the penalty or sanction.
3. **Hearing Processes** — The regional entity shall make available a regional entity hearing process for entities to contest a finding of noncompliance, penalty, sanction, or remedial actions in which the bulk power system owner, operator, or user will be afforded the opportunity to present facts to rebut such a finding. The regional entity shall also make available the NERC appeals process for bulk power system owners, operators, and users seeking an opportunity to dispute a penalty, sanction, or remedial action. Appeals beyond NERC of a finding of noncompliance, penalty, sanction, or remedial action will be before the appropriate regulator.
4. **Effective Date of Penalty** — Where authorized by applicable legislation or agreement, no penalty imposed for a violation of a reliability standard shall take effect until the thirty-first day after NERC files, with the applicable governmental authority, a “notice of penalty” and the record of the proceedings in which the violation and penalty were determined, or such other date as ordered by the applicable governmental authority.

**408. Reporting and Disclosure Process**

1. **Reporting Requirements** — Each regional entity shall report all known violations, self-reported, confirmed, and alleged, of all reliability standards to NERC in accordance with reporting guidelines established by NERC. Probable violations from NERC readiness audits will be treated as an alleged violation when reported by the regional entity to NERC after review by regional entity staff. Each regional entity shall promptly report any change in the status of a violation and the disposition of each violation. Reports on the disposition of a violation will be provided at least quarterly or as otherwise required by NERC for reporting to governmental authorities. NERC shall promptly notify the applicable governmental authority of any violation, alleged violation, investigation, enforcement action, or compliance directive.
  - 1.1 Requirements that are not administrative in nature, those where reliability may be diminished or at risk, will be identified by NERC and require

reporting by the regional entity to NERC within 48 hours of when the regional entity learns of the occurrence. Such reports shall include information regarding the nature and reliability impact of the alleged violations, the identity of the organizations involved, and the status and timetable of any investigation.

2. **Reporting Process** — NERC shall implement and maintain a reporting process and utilize appropriate tools to facilitate violation reporting. The process shall identify all of the information required to be included in a violation report. NERC will report, to the applicable governmental authority, the disposition of each violation or alleged violation on a quarterly basis.
3. **Confidential Information** — Bulk power system owners, operators, and users seeking to protect information as confidential have the obligation to demonstrate that the information qualifies for confidential treatment.
  - 3.1 The regional entity and NERC shall give bulk power system owners, operators, and users a reasonable opportunity to demonstrate that information concerning a violation is confidential before such report is disclosed to the public.
  - 3.2 The following types of information will be considered confidential and will not (subject to statutory and regulatory requirements) be disclosed in any public information reported by NERC, (i) confidential business and market information including information that is proprietary, commercially valuable, or competitively sensitive; (ii) critical energy infrastructure information (*NERC Security Guidelines for the Electricity Sector — Protecting Potentially Sensitive Information* may be used as a guide); (iii) personnel information that identifies or could be used to identify a specific individual, or reveals personnel, financial, medical, or other personal information; (iv) audit work papers; or (v) investigative files.
4. **Reporting Updated Information** — Each regional entity and NERC shall report new information on each confirmed or alleged violation as it is received and processed.
5. **Violation Information Review** — NERC staff shall periodically review and analyze all reports of violations to identify trends, chronic violators, and other pertinent reliability issues.
6. **Public Posting** — When the affected bulk power system owner, operator, or user either agrees with the violation(s) or report, or the time for submitting an appeal is passed, or all appeals processes are complete, NERC shall publicly post each confirmed violation, penalty or sanction, and audit or investigation report on its Web site.
  - 5.1 Each bulk power system owner, operator, or user may provide NERC with a statement to accompany the violation or report to be posted publicly.

The statement must be on company letterhead and include a signature, as well as the name and title of the person submitting the information.

- 5.2 Information deemed by a bulk power system owner, operator, or user, regional entity, or NERC as critical energy infrastructure information (*NERC Security Guidelines for the Electricity Sector — Protecting Potentially Sensitive Information* may be used as a guide) shall be redacted according to NERC procedures and not be released publicly.

**409. Regional Reliability Organization or Regional Entity Review of NERC Decisions**

1. **Scope of Review** — A regional reliability organization wishing to challenge a finding of noncompliance and the imposition of a penalty for a compliance measure directly administered by NERC, or a regional entity wishing to challenge a regional compliance program audit finding may do so by filing a notice of the challenge with NERC’s director of compliance no later than 21 days after issuance of the finding of violation or audit finding.
2. **Contents of Notice** — The notice shall include the full text of the decision that is being challenged, a concise statement of the error or errors contained in the decision, a clear statement of the relief being sought, and argument in sufficient detail to justify such relief.
3. **Response by NERC Compliance Enforcement Program** — Within 21 days after receiving a copy of the notice, the NERC Compliance Enforcement Program may file a response to the issues raised in the notice, with a copy to the regional reliability organization or regional entity.
4. **Hearing by Compliance and Certification Committee** — The NERC Compliance and Certification Committee shall provide representatives of the regional reliability organization or regional entity and the NERC Compliance Enforcement Program an opportunity to be heard and shall decide the matter based upon the filings and presentations made, with a written explanation of its decision.
5. **Appeal** — The regional reliability organization or regional entity may appeal the decision of the Compliance and Certification Committee by filing a notice of appeal with NERC’s director of compliance no later than 21 days after issuance of the decision by the Compliance and Certification Committee. The notice of appeal shall include the full text of the decision of the Compliance and Certification Committee that is being appealed, a concise statement of the error or errors contained in the decision, a clear statement of the relief being sought, and argument in sufficient detail to justify such relief. No factual material shall be presented in the appeal that was not presented to the Compliance and Certification Committee.
6. **Response by NERC Compliance Enforcement Program** — Within 21 days after receiving a copy of the notice of appeal, the NERC Compliance

Enforcement Program may file its response to the issues raised in the notice of appeal, with a copy to the entity filing the notice.

7. **Reply** — The entity filing the appeal may file a reply within 7 days.
8. **Decision** — The Compliance Committee of the NERC Board of Trustees shall decide the appeal, in writing, based upon the notice of appeal, the record, the response, and any reply. At its discretion, the Compliance Committee may invite representatives of the regional reliability organization or regional entity and the NERC Compliance Enforcement Program to appear before the Committee. Decisions of the Compliance Committee shall be final, except for further appeal to the applicable governmental authority.
9. **Impartiality** — No person having a direct interest in the matter may participate in any aspect of the challenge or appeal except as a party or witness.
10. **Expenses** — Each party in the challenge and appeals processes shall pay its own expenses for each step in the process.
11. **Non-Public Proceedings** — All challenges and appeals shall be closed to the public to protect confidential information.

#### **410. Appeals from Final Decisions of Regional Entities**

1. **Time for Appeal** — An entity wishing to appeal from a final decision of a regional entity that finds a violation of a reliability standard or imposes a penalty for violation of a reliability standard shall file its notice of appeal with NERC's director of compliance, with a copy to the regional entity, no later than 21 days after issuance of the regional entity's final decision.
2. **Contents** — The notice of appeal shall include the full text of the final decision of the regional entity that is being appealed, a concise statement of the error or errors contained in the final decision, a clear statement of the relief being sought, and argument in sufficient detail to justify such relief. No factual material shall be presented in the appeal that was not first presented during the enforcement proceeding before the regional entity.
3. **Response by Regional Entity** — Within 21 days after receiving a copy of the notice of appeal, the regional entity shall file the entire record of the matter with NERC's director of compliance, with a copy to the entity filing the notice, together with its response to the issues raised in the notice of appeal.
4. **Reply** — The entity filing the appeal may file a reply to the regional entity within 7 days.
5. **Decision** — The Compliance Committee of the NERC Board of Trustees shall decide the appeal, in writing, based upon the notice of appeal, the record, the response, and any reply filed with NERC. At its discretion, the Compliance

Committee may invite representatives of the entity taking the appeal and the regional entity to appear before the Committee. Decisions of the Compliance Committee shall be final, except for further appeal to the applicable governmental authority.

6. **Expenses** — Each party in the appeals process shall pay its own expenses for each step in the process.
7. **Non-Public Proceedings** — All appeals shall be closed to the public to protect confidential information.

**411. Hold Harmless**

A condition of invoking the challenge or appeals processes under Section 409 or 410 is that the entity requesting the challenge or appeal agrees that neither NERC (defined to include its members, Board of Trustees, committees, subcommittees, staff and industry volunteers), any person assisting in the challenge or appeals processes, nor any company employing a person assisting in the challenge or appeals processes, shall be liable, and they shall be held harmless against the consequences of or any action or inaction or of any agreement reached in resolution of the dispute or any failure to reach agreement as a result of the challenge or appeals proceeding. This “hold harmless” clause does not extend to matters constituting gross negligence, intentional misconduct, or a breach of confidentiality.

## **SECTION 500 — ORGANIZATION REGISTRATION AND CERTIFICATION**

### **501. Scope of the Organization Registration and Certification Program**

Enforcing compliance with the NERC reliability standards requires that the identity of those responsible for complying with the standards be known and that those with primary reliability responsibilities be reviewed and certified as meeting established minimum requirements for performing those tasks. NERC shall develop and maintain a compliance registry and certification program for the purpose of promoting compliance with reliability standards and enhancing the reliability of the bulk power system.

The purpose of the compliance registry will be to clearly identify those entities that are responsible for compliance with reliability standards. Organizations listed on the registry will be responsible for knowing the content of and for complying with the NERC reliability standards. Organizations listed in the registry are not, nor do they become, members of NERC, a regional entity, or a regional reliability organization by virtue of being listed in the compliance registry. Membership in NERC is governed by Article II of NERC's bylaws; membership in a regional entity or regional reliability organization is governed by that entity's bylaws or rules.

Organization registration and certification may be delegated to regional entities in accordance with the procedures in this Section 500, the *NERC Organization Registration and Certification Manual*, which is incorporated into these rules as **Appendix 5**, and approved regional entity delegation agreements or other applicable agreements.

1. **Compliance Registry** — NERC shall establish and maintain a compliance registry of the bulk power system owners, operators, and users that are subject to approved reliability standards.
  - 1.1 The registry shall identify the functions identified in reliability standards that each organization performs, including: reliability coordinators, balancing authorities, transmission operators, transmission owners, generator operators, generator owners, transmission service providers, planning authorities, transmission planners, resource planners, load-serving entities, purchasing-selling entities, and distribution providers. Bulk power system owners, operators, and users shall provide to NERC and the applicable regional entity such information as is necessary to complete the registration.
  - 1.2 NERC and regional entities assisting NERC in the development of the compliance registry shall consider the following factors in determining which organizations should be placed in the registry:
    - 1.2.1 Owners and operators of bulk power system facilities will generally be included in the registry;



- 1.2.2 As identified by regional reliability organizations, electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher will be considered part of the bulk power system;
- 1.2.3 Radial transmission facilities serving only load with one transmission source, without more, will not be considered part of the bulk power system;
- 1.2.4 A customer that receives electric service at retail and does not otherwise directly receive, sell, purchase, or transmit power over the bulk-power system or own, operate, maintain, or control facilities or systems that are part of the bulk power system will not in general be considered a user of the bulk power system;
- 1.2.5 An entity directly connected to the bulk power system selling, purchasing, or transmitting electric energy over the bulk-power system will generally be considered a user of the bulk power system, unless the entity's actions or facilities have no material impact on the bulk power system;
- 1.2.6 Notwithstanding the other considerations in this Section 1.2, if the consequences of an entity's actions or inactions could have a material impact on the bulk power system, that entity may be considered a user of the bulk power system.
- 1.2.7 A generation or transmission cooperative, or similar joint-action agency may be registered, in lieu of each of its members being registering individually, by accepting the reliability functions identified in Section 1.1 above, of that entity's members.
- 1.3 NERC and the regional entities shall use the following procedure for establishing and maintaining the compliance registry:
  - 1.3.1 NERC shall notify each organization of its intent to place the organization on the compliance registry.
  - 1.3.2 Any organization receiving such a notice may challenge the decision to include it on the compliance registry by filing its written objection with NERC's director of compliance within 21 days stating the reasons it believes it should not be considered a bulk power system owner, operator, or user.
  - 1.3.3 The Compliance Committee of the Board of Trustees will promptly issue a written decision on the challenge, including the reasons for the decision.

- 1.3.4 The decision of the Compliance Committee shall be final unless, within 21 days, the organization appeals the decision to the applicable governmental authority.
  - 1.3.5 At any time a person may recommend in writing, with supporting reasons, to the Director of Compliance that an organization be added to or removed from the compliance registry.
  - 1.3.6 The compliance registry shall be dynamic and be revised as necessary to take account of changing circumstances. NERC will take such recommendations, and other applicable information, under advisement as it determines whether an entity should be on the compliance registry.
- 1.4 For all geographical or electrical areas of the bulk power system, the registration process shall ensure that (1) no areas are lacking any entities to perform the duties and tasks identified in and required by the reliability standards to the fullest extent practical, and (2) there is no duplication of such coverage or of required oversight of such coverage.
- In particular the process shall:
- 1.4.1 Ensure that all areas are under the oversight of one and only one reliability coordinator.
  - 1.4.2 Ensure that all balancing authorities and transmission operator entities<sup>2</sup> are under the responsibility of one and only one reliability coordinator.
  - 1.4.3 Ensure that all transmission elements of the bulk power system are the responsibility and under the control of one and only one transmission planner, planning authority, and transmission operator.
  - 1.4.4 Ensure that all loads and generators are under the responsibility and control of one and only one balancing authority.
- 1.5 NERC shall maintain publicly available process documentation.
- 1.6 NERC shall maintain the compliance registry of organizations responsible for meeting the requirements of the reliability standards currently in effect on its website.

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<sup>2</sup> Some organizations perform the listed functions (e.g., balancing authority, transmission operator) over areas that transcend the footprints of more than one reliability coordinator. Such organizations will have multiple registrations, with each such registration corresponding to that portion of the organization's overall area that is within the footprint of a particular reliability coordinator.

2. **Entity Certification** — NERC shall provide for certification of all entities with primary reliability responsibilities requiring certification as established in the NERC reliability standards. The NERC program shall:
  - 2.1 Evaluate and certify the competency of entities performing reliability functions. The entities presently expected to be certified include reliability coordinators, transmission operators, and balancing authorities. Other entities may be added, as required, by approved reliability standards.
  - 2.2 Certify each entity's ability to meet the minimum requirements established by the NERC reliability standards for each function.
  - 2.3 Maintain process documentation.
  - 2.4 Maintain records of currently certified entities.
3. **Delegation and Oversight**
  - 3.1 NERC may delegate the responsibilities of registration and certification to regional entities in accordance with requirements established by NERC. Delegation will be via the delegation agreement between NERC and the regional entity or other applicable agreement. The regional entity shall administer an organization registration and certification program to meet NERC's program goals and requirements.
  - 3.2 NERC shall develop and maintain a plan to ensure the continuity of organization registration and certification within the geographic or electrical boundaries of a regional entity in the event that no entity is certified as a regional entity for that region, or the regional entity withdraws as a regional entity, or does not operate its organization registration and certification program in accordance with delegation agreements and other requirements.
  - 3.3 NERC shall develop and maintain a program to monitor and oversee each regional entity registration and certification program that is delegated authority through a delegation agreement or other applicable agreement.
    - 3.3.1 This program shall monitor whether the regional entity carries out its organization registration and certification program in accordance with NERC requirements, and whether there is consistency, fairness of administration, and comparability of outcomes within each regional entity's certification and registration program and among all of the programs.
    - 3.3.2 Monitoring and oversight shall be accomplished through direct participation in certification audits and periodic reviews of program documents and records.

**502. ERO Organization Registration and Certification Program Requirements**

1. NERC shall have final authority in all matters constituting the organization registration and certification program.
  - 1.1 The roles and authority of regional entities in the program are delegated from NERC pursuant to the rules of procedure through regional delegation agreements or other applicable agreements.
  - 1.2 Processes for the program shall be owned by NERC; materials that each regional entity may use to participate in the program may be adapted by that organization subject to prior review and approval by NERC.
  - 1.3 Regional entities participating in the program shall perform their roles and responsibilities to meet NERC's requirements, as specified in the rules of procedure or NERC approved materials, including requirements for quality, thoroughness, timeliness, accuracy, efficiency, cost-effectiveness, and participants.
  - 1.4 Regional entity's decisions to grant or deny certifications shall be subject to NERC review and action, including modification or reversal.
  - 1.5 Regional entity's decisions with respect to the use of the transitional certification processes, as now provided for within the *NERC Organization Registration and Certification Manual (Appendix 5)*, are subject to NERC review and action, including modification or reversal, should NERC deem such review or action warranted.
  - 1.6 Notwithstanding an entity's interest and right to object to the makeup of the certification team that will conduct the review of that entity, NERC, or the regional entity as authorized by NERC, will have final authority on the membership and member roles of that team.
  - 1.7 NERC, or by the regional entity as authorized by NERC, shall make all assessments and decisions with respect to all aspects of the organization registration and certification program, including the completeness and accuracy of entities' applications.
2. To ensure consistency and fairness of the program, NERC shall develop procedures to be used by all regional entities in carrying out their organization registration and certification programs, in accordance with the following criteria:
  - 2.1. NERC and the regional entities shall have data management processes and procedures that provide for integrity and retention of data and information collected.
  - 2.2. To maintain the integrity of the NERC Organization Registration and Certification Program, NERC, regional entities, certification audit team

members, and committee members shall maintain the confidentiality of information provided by entities in order to become registered or certified.

- 2.2.1 NERC and the regional entities shall have appropriate codes of conduct and confidentiality agreements for staff and other certification audit participants. Individuals not bound by ERO or approved regional entity codes of conduct and who serve on certification-related committees or audit teams shall sign an ERO confidentiality agreement prior to participating on the committee or team.
  - 2.2.2 Staff, committee, and audit team members shall maintain the confidentiality of any certification-related discussions or documents that are designated as confidential (see Section 408 for types of confidential information). Staff, committee, and audit team members shall treat as confidential the individual comments expressed during audits and report-drafting sessions.
  - 2.2.3 Copies of notes, draft reports, and other interim documents developed or used during a certification audit shall be destroyed after the public posting of a final, uncontested report.
  - 2.2.4 Information deemed by an entity, a regional entity, or NERC as confidential or critical energy infrastructure information (*NERC Security Guidelines for the Electric Sector — Protecting Potentially Sensitive Information* may be used as a guide) shall not be distributed outside of a committee or team, or released publicly.
  - 2.2.5 In the event that a staff, committee, or audit team member violates the intent of the principle or any of the confidentiality rules set forth above, the staff, committee, or audit team member and any member organization with which the individual is associated may be subject to appropriate action by the regional entity or NERC.
  - 2.2.6 NERC shall develop and provide training in auditing skills to all individuals who participate in certification audits. Training for ERO and regional entity personnel, as well as audit team leaders, shall be more comprehensive than training given to industry experts, regional entity members, and volunteers. Training for regional entity members and volunteers may be delegated to the regional entity.
- 2.3. An entity that is determined to be competent to perform a function after completing all certification requirements shall be deemed certified by NERC to perform that function.
    - 2.3.1. An entity deemed certified by NERC to perform a function shall be considered and may be referred to, for example, as a certified

transmission operator, certified balancing authority or certified reliability coordinator. Only entities that have received such certifications from NERC shall be so designated.

- 2.3.2. NERC shall award certification to an entity only after it has demonstrated full competency to all certification requirements. An entity shall be awarded certification only for each function for which it has demonstrated full competency

**503. Regional Entity Implementation of Organization Registration and Certification Program Requirements**

1. **Delegation** — Recognizing the regional entity’s knowledge of and experience with their members, NERC may delegate responsibility for organization registration and certification to the regional entity through a delegation agreement or such responsibilities may be established through another applicable agreement.
2. **Registration** — The following organization registration activities shall be performed by the regional entity in accordance with the NERC delegation agreement applicable agreement:
  - 2.1. Entities seeking registration shall contact the regional entity in which they operate to become registered and, if necessary, certified.
  - 2.2. Regional entities shall verify that all balancing authorities and transmission operators are under the responsibility of one and only one reliability coordinator.
  - 2.3. Regional entities shall verify that all transmission elements of the bulk power system operated within their geographic boundaries are under the authority and control of one and only one transmission planner, planning authority, transmission owner, and transmission operator.
  - 2.4. Regional entities shall verify that all loads and generation sources within their geographic boundaries are under the authority and control of one and only one balancing authority.
  - 2.5. Regional entities shall verify that no geographical or electrical areas of the bulk power system within their boundaries have duplication of coverage or are lacking an entity to perform required duties and tasks as identified in the reliability standards.
3. **Certification** — The following organization certification activities shall be performed by the regional entity in accordance with an approved ERO delegation agreement or another applicable agreement:
  - 3.1 Entities seeking certification to perform one of the functions requiring certification shall contact the regional entity for the region(s) in which

they operate to apply for certification. NERC shall have oversight of the regional entity's certification activities and processes.

- 3.2 Entities seeking certification and other affected operators shall provide all information and data requested by NERC or the regional entity to conduct the certification process, in accordance with Section 39.2 of Federal Energy Regulatory Commission Order 672 in the United States.
- 3.3 Regional entities shall contact entities directly and provide notice of the requirement to be certified by NERC and initiate the process to certify any entities that do not voluntarily contact the regional entity or NERC.
- 3.4 Regional entities shall notify NERC of all certification applicants, including those not voluntarily seeking certification.
- 3.5 The regional entity shall establish certification procedures to include audit processes, schedules and deadlines, expectations of the applicants and all entities participating in the audit and certification processes, and requirements for certification auditors.
  - 3.5.1 The regional entity certification procedures will include provisions for on-site visits to the applicant's facilities to review the data collected through questionnaires, interviewing the operations and management personnel, inspecting the facilities and equipment (and requesting a demonstration of all tools identified in the certification standard), reviewing all necessary documents and data (including all agreements, processes, and procedures identified in the certification standard), reviewing certification documents and projected system operator work schedules, and reviewing any additional documentation that is needed to support the completed questionnaire or inquiries arising during the site visit.
  - 3.5.2 All industry experts and regional members participating in certification audits shall successfully complete appropriate training provided by NERC or the regional entity prior to performing an audit.
  - 3.5.3 The regional entity certification procedures will provide for preparation of a written report by the audit team detailing any deficiencies that must be resolved prior to certification along with any other recommendations for consideration by the entity, the regional entity, or NERC.
  - 3.5.4 The regional entity shall evaluate the competency of entities requiring certification to meet the minimum requirements established by the standards for each such function based on the requirements established by NERC.

**504. Appeals**

1. NERC shall maintain an appeals process to resolve any disputes related to registration or certification activities (*Organization Registration and Certification Manual* — **Appendix 5**).
2. Each regional entity with delegated responsibilities shall establish and maintain a fair, independent, and nondiscriminatory appeals process. The regional entity appeals process shall culminate with the regional board or a committee established by the board as the final adjudicator, provided that: (1) in ERCOT, the Public Utility Commission of Texas may act as the final adjudicator, and (2) where applicable, Canadian provincial governmental authorities may act as the final adjudicator in their jurisdictions. NERC shall be notified of all appeals and may observe any proceedings.

**505. Program Maintenance**

NERC shall maintain its program materials, including such manuals or other documents as it deems necessary, of the governing policies and procedures of the organization registration and certification program.

**506. Independent Audit of NERC Organization Certification Program**

1. NERC shall provide for an independent audit of its organization certification program at least once every three years, or more frequently, as determined by the board. The audit shall be conducted by independent expert auditors as selected by the board.
2. The audit shall evaluate the success and effectiveness of the NERC organization certification program in achieving its mission.
3. The final report shall be posted by NERC for public viewing according to the reporting and disclosure process in Section 408.
4. If the audit report includes recommendations to improve the program, the administrators of the program shall provide a written response and plan to the board within 30 days of the final report.



## **SECTION 600 — PERSONNEL CERTIFICATION**

### **601. Scope of Personnel Certification**

Maintaining the reliability of the bulk electric system through implementation of the reliability standards requires skilled, trained and qualified system operators. The System Operator Certification Program provides the mechanism to ensure system operators are provided the education and training necessary to obtain the essential knowledge and skills and are therefore qualified to operate the bulk electric system. NERC, as the ERO, will ensure skilled, trained, and qualified system operators through the System Operator Certification Program.

NERC shall develop and maintain a personnel certification program to evaluate individuals and to issue credentials to individuals who demonstrate the required level of competence. A current version of such a program is the *System Operator Certification Program Manual*, which is incorporated into these rules as **Appendix 6**.

### **602. Structure of ERO Personnel Certification Program**

1. The NERC personnel certification program shall be international in scope.
2. The personnel certification program shall have a governing body that (1) is able to independently exercise decision-making for all matters pertaining to certification, (2) includes individuals from the discipline being certified and whose composition addresses the needs of the users of the program (e.g., employers, regulators, etc.), and (3) has representation for each specialty or level within a discipline.
3. NERC shall maintain a nominating process for membership in the governing body. Nominations shall be open to all interested parties and self-nominations shall be accepted. The NERC Board of Trustees shall appoint members to the governing body from among those nominated. The members of the governing body shall serve at the pleasure of the board.
4. The personnel certification program governing body shall have control over the matters related to the personnel certification and recertification programs listed below, without being subject to approval by any other body.
  - 4.1 Policies and procedures, including eligibility requirements and application processing.
  - 4.2 Requirements for personnel certification, maintaining certification, and recertification.
  - 4.3 Examination content, development, and administration.
  - 4.4 Examination cut score.
  - 4.5 Grievance and disciplinary processes.

- 4.6 Governing body and subgroup(s)' meeting rules including agenda, frequency, and related procedures.
  - 4.7 Subgroup(s) appointments and work assignments.
  - 4.8 Publications about personnel certification and recertification.
  - 4.9 Setting fees for application, and all other services provided as a part of the personnel certification and recertification activities.
  - 4.10 Program funding, spending, and budget authority. Financial matters related to the operation of the program shall be segregated from other NERC activities.
5. The personnel certification program shall utilize written procedures for the selection of members of the governing body that prohibit the governing body from selecting a majority of its successors.
  6. The personnel certification program shall be separate from the accreditation and education functions of NERC in related disciplines.

**603. Candidate Testing Mechanisms**

1. The personnel certification program shall utilize reliable testing mechanisms to evaluate individual competence in a manner that is objective, fair to all candidates, job-related, and based on the knowledge and skill needed to function in the discipline.
2. The personnel certification program shall implement a formal policy of periodic review of the testing mechanisms to ensure ongoing relevance of the mechanisms to knowledge and skill needed in the discipline.
3. The personnel certification program shall utilize policies and procedures to ensure that all test administration and development materials are secure and demonstrate that these policies and procedures are consistently implemented.
4. The personnel certification program shall establish pass/fail levels that protect the public with a method that is based on competence and generally accepted in the psychometric community as being fair and reasonable.
5. The personnel certification program shall conduct ongoing studies to substantiate the reliability and validity of the testing mechanisms.
6. The personnel certification program shall utilize policies and procedures that govern how long examination records are kept in their original format.
7. The personnel certification program shall demonstrate that different forms of the testing mechanisms assess equivalent content and that candidates are not penalized for taking forms of varying difficulty.

**604. Public Information About the Personnel Certification Program**

1. The personnel certification program shall provide for publishing and availability of general descriptive material on the procedures used in examination construction and validation; all eligibility requirements and determination; fees; and examination administration documents, including: reporting of results, recertification requirements, and disciplinary and grievance procedures.
2. The personnel certification program shall publish and make available a comprehensive summary or outline of the information, knowledge, or functions covered by the examination.
3. The personnel certification program shall publish and make available at least annually a summary of certification activities for the program, including at least the following information: number of examinations delivered, the number passed, the number failed, and the number certified.

**605. Responsibilities to Applicants for Certification or Recertification**

The personnel certification program:

1. Shall not discriminate among applicants as to age, gender, race, religion, national origin, disability, or marital status and shall include a statement of non-discrimination in announcements of the program.
2. Shall comply with all requirements of applicable federal and state/provincial laws with respect to all certification and recertification activities, and shall require compliance of all contractors and/or providers of services.
3. Shall make available to all applicants copies of formalized procedures for application for, and attainment of, personnel certification and recertification and shall uniformly follow and enforce such procedures for all applicants.
4. Shall implement a formal policy for the periodic review of eligibility criteria and application procedures to ensure that they are fair and equitable.
5. Shall provide competently proctored examination sites.
6. Shall uniformly report examination results to applicants in a timely manner.
7. Shall give applicants failing the examination information on general content areas of deficiency.
8. Shall implement policies and procedures providing due process for applicants questioning eligibility determination, examination results, and certification status, and shall publish this information. A current version of such a procedure is the *NERC System Operator Certification Dispute Resolution Process*, which is incorporated into these rules as part of **Appendix 6**.

9. Shall develop and maintain a program manual containing the processes and procedures for applicants for certification and recertification.

**606. Responsibilities to the Public and to Employers of Certified Practitioners**

The personnel certification program:

1. Shall demonstrate that the testing mechanisms adequately measure the knowledge and skill required for entry, maintenance, and/or advancement in the profession for each position to be certified.
2. Shall award certification and recertification only after the skill and knowledge of the individual have been evaluated and determined to be acceptable.
3. Shall periodically publish or maintain, in an electronic format, a current list of those persons certified in the programs and have policies and procedures that delineate what information about a credential holder may be made public and under what circumstances.
4. Shall have formal policies and procedures for discipline of a credential holder, including the revocation of the certificate, for conduct deemed harmful to the public or inappropriate to the discipline (e.g., incompetence, unethical behavior, physical or mental impairment affecting performance). These procedures shall incorporate due process. The current procedure is the *NERC Certified System Operator Credential Disciplinary Action Procedure*, which is incorporated into these rules as part of **Appendix 6**.
5. Shall demonstrate that any title or credential awarded accurately reflects or applies to the practitioner's daily occupational or professional duties and is not confusing to employers, consumers, regulators, related professions, and/or other interested parties.

## **SECTION 700 — RELIABILITY READINESS AUDIT AND IMPROVEMENT**

### **701. Scope of the Reliability Readiness Audit and Improvement Program**

The readiness audits are designed to ensure that operators of the bulk electric system have the facilities, tools, processes, and procedures in place to operate reliably under future conditions. The audits help balancing authorities, transmission operators, and reliability coordinators recognize and assess their reliability responsibilities and evaluate how their operations support those responsibilities. NERC uses the results of these audits to champion the changes required to improve the reliability performance of these entities and achieve excellence in the assigned reliability functions and responsibilities.

Monitoring compliance with reliability standards provides only a historical perspective by determining if a registered entity has complied with the NERC reliability standards over some prescribed period in the past. An effective ERO will also recognize that monitoring compliance absent a system emergency or disturbance does not effectively preserve reliability or ensure the ability to perform and achieve excellence during a system emergency or disturbance.

NERC identifies those entities with primary reliability responsibilities and provide guidance to help them achieve operational excellence through the Reliability Readiness Audit and Improvement Program. This program recognizes that standards cannot prescribe all aspects of reliable operations and that NERC standards present a threshold, not a target, for performance and excellence in the industry. Balancing authorities, transmission operators, and reliability coordinators must be ready to perform under emergency conditions while striving for excellence in their assigned reliability functions and responsibilities.

NERC maintains a reliability readiness audit and improvement program for the purpose of promoting compliance with reliability standards and enhancing the reliability of the bulk power system. The program assesses the reliability readiness of reliability coordinators, balancing authorities, transmission operators, and other entities with responsibilities to operate the bulk power system reliably, and to identify opportunities for improvement. NERC may also create sector forums (see section 712) to enhance the reliability of the bulk power system by providing a mechanism for members of a particular industry sector, using peer review and mutual assistance, to identify best practices in the safety and reliability of the bulk power system, to disseminate lessons learned from disturbances, near misses, and other events, and to encourage all members of the sector to implement those practices and lessons on a timely basis. The Reliability Readiness Audit and Improvement Program will coordinate with the sector forums as appropriate to provide input from the readiness audits.

**702. Structure of the Reliability Readiness Audit and Improvement Program**

1. NERC shall have overall responsibility for coordinating readiness audits in accordance with the *NERC Readiness Audit Procedure*, which is incorporated into these rules as **Appendix 7**.
2. NERC staff shall have the primary responsibility for executing the following procedural steps: (1) development of the overall schedule in conjunction with the appropriate regional entity to coordinate audit activities; (2) initiation of the audit process for each entity; (3) provision of audit questionnaires, processes, data requests, and documentation; (4) identification of readiness audit team members; (5) coordination of audited entity and neighboring entity questionnaires; and (6) publication of audit findings.
3. The NERC audit team shall perform the following functions: (1) review the audited entity's questionnaire responses and documentation and research any issues or events identified; (2) perform the on-site audits; and (3) prepare a report of findings.

**703. Scheduling of Readiness Audits**

1. NERC staff in conjunction with the regional entities shall prepare a three-year cycle of readiness audits that will be updated annually by a date specified by NERC.
2. NERC shall obtain from the regional entity the identity of a contact person at each entity to be audited.
3. Readiness audits shall not be conducted in conjunction with compliance enforcement audits. Both audits can be conducted simultaneously but must use separate personnel.

**704. Resources for Readiness Audits**

1. NERC shall select an audit team in advance of each audit according to a schedule specified by NERC.
2. The audit team shall consist of members possessing expertise and experience specified by NERC.
3. The audit team shall be of a size specified by NERC.
4. NERC shall develop and provide training in auditing skills to all individuals who participate in readiness audits. Training for NERC audit team leaders and Regional Entity personnel shall be more comprehensive than training given to industry experts and regional members.
5. All audit team members not bound by NERC or other codes of conduct shall sign and abide by a NERC confidentiality agreement prior to participating in any of

the audit activities. Copies of the confidentiality agreement shall be maintained by NERC and will be available upon request by the audited entity.

6. The use of observers will be limited and shall be agreed upon by both NERC and the entity being audited. Observers shall only observe the audit process, and shall not participate in the creation and editing of the report or its findings, or interfere with the audit process. The audit team leader may remove any observer from the audit who is not abiding by these criteria.

#### **705. Pre-Readiness Audit Activities**

NERC will require certain information to perform readiness audits of operating entities. These entities shall provide to NERC such information as is necessary to conduct the readiness audits.

1. Prior to an audit, NERC shall provide the entity a request for information and a questionnaire. The entity shall return the requested information and the completed questionnaire according to a schedule specified by NERC.
2. NERC shall provide a questionnaire to neighboring operating entities with which the audited entity routinely interacts. The neighboring operating entities shall return the completed questionnaires within a period of time specified by NERC.
3. Prior to the audit, NERC shall provide an audit agenda to the entity to be audited and to the audit team.
4. The audit team will coordinate before the on-site audit begins to review questionnaire responses, identify areas requiring further investigation, discuss concerns, coordinate the interview process, and assign responsibilities during the on-site visit.

#### **706. On-Site Activities for the Readiness Audit**

1. The audit team will meet on-site for a period defined by NERC to conduct the readiness audit according to the agenda provided in advance. The audit team will conduct interviews with personnel, review documentation, and make observations about the entity's tools, facilities, and processes.
2. The audit team's findings shall be based on data collected from the audited entity's questionnaire and documentation, neighboring operating entities' questionnaires, and observations and information collected during the on-site visit.
3. Evidence of possible noncompliance with a reliability standard shall be reported to NERC for resolution through the applicable compliance enforcement program. If the issue is judged to be an immediate threat to reliability, the notification to NERC and the regional entity shall be made within 24 hours of discovery. Possible noncompliance with a NERC standard will not be identified in the readiness audit report. It will be treated as an alleged violation only after regional

entity compliance staff review, and will be disclosed only after verification through the NERC Compliance Enforcement Program.

4. Upon completion of the on-site audit, the audit team shall make a presentation to the audited entity of preliminary findings and recommendations that will be included in the audit report.

#### **707. Preparation and Posting of the Audit Report**

1. The audit team leaders shall prepare a draft audit report. The report will be sent to the audit team for review, within a period of time after the audit specified by NERC.
2. The audit team shall have a period of time specified by NERC to respond to the draft audit report. If a team member does not respond within the allotted time, such non-response shall be considered agreement with the contents of the report.
3. The draft audit report shall then be sent to the audited entity for its review to ensure that there are no factual errors in the report. The audited entity shall respond within a period of time specified by NERC. If the audited entity does not respond within the specified time, such non-response shall be considered agreement with the content of the report. The audited entity may provide feedback in the form of corrections and clarifications that will be considered by the audit team for inclusion in the final report.
4. After agreeing on any final corrections, the audit team shall post the final audit report on the NERC Web site within a period of time from the on-site audit specified by NERC. Business sensitive energy or critical electrical infrastructure information will be redacted prior to posting.
5. Should the audited entity disagree with the audit team's findings, the entity may provide a statement in writing to be posted on the NERC Web site in conjunction with the final report.
6. After the final audit report is posted, should the audited entity seek adjudication of a dispute of the findings or recommendations through the NERC dispute resolution process, it shall notify NERC within a period of time specified by NERC. Upon receipt of such notification, NERC will initiate the *Appeals Process for the NERC Reliability Readiness Audit and Improvement Program*, which is incorporated into these rules as **Appendix 7**. The final report shall remain posted during the appeals process.
7. In response to the posted audited report and within a period of time after the posting specified by NERC, the audited entity shall provide a response plan to NERC addressing the report recommendations, including a timeline for implementation. The response plan shall be published on the NERC Web site when submitted by the entity. If the audited entity requests, NERC will offer



assistance in developing a suitable response plan to address the report's recommendations. The entity shall notify NERC of its request for assistance.

8. NERC may direct that a mid-cycle follow-up audit be scheduled

**708. Implementation of Recommendations of the Readiness Audit Report**

1. Audited entities may implement actions based on the recommendation or may review the recommendation and determine that no action is warranted or necessary and provide documentation on their decisions as well as the response plan.
2. NERC shall monitor the audited entity's implementation of the recommendations of the audit report and the audited entity's response plan, and shall report progress to the board.

**709. Examples of Excellence**

NERC shall identify and publish examples of excellence identified during the course of readiness audits. "Examples of excellence" are practices utilized by owners, operators and users of the bulk power system that are identified as being exceptionally effective in ensuring and protecting the reliability of the bulk power system. These "examples of excellence" may be identified through a readiness audit or submitted to NERC for an on-site evaluation.

**710. Confidentiality Requirements for Readiness Audits and Audit Team Members**

1. All information made available or created during the course of the audit including, but not limited to, data, documents, observations and notes, shall be maintained as confidential by all audit team members.
2. Other information to be treated as confidential by audit team members and in the final audit report is described in Section 408.
3. Audit team members are obligated to destroy all confidential audit notes following the posting of the final report.
4. NERC will retain audit-related documentation, notes, and materials for a period of time as defined by NERC.

**711. Independent Audit of the Reliability Readiness Audit and Improvement Program**

1. NERC shall provide for an independent audit of its reliability readiness audit and improvement program at least once every three years or more frequently as determined by the board. The audit shall be conducted by independent expert auditors as selected by the board.
2. The audit shall evaluate the success and effectiveness of the NERC reliability readiness audit and improvement program in achieving its mission.
3. If the audit report includes recommendations to improve the reliability readiness improvement and program, the administrators of the program shall provide a written response and plan to the board within 30 days of the final report.
4. The final report shall be posted by NERC for public viewing according to the *ERO Guidelines for Reporting and Disclosure*, which are incorporated into these rules in Section 408.

**712. Formation of Segment Forum**

1. NERC will form a segment forum at the request of any five members of NERC that share a common interest in the safety and reliability of the bulk power system. The members of the segment forum may invite such others of the members of NERC to join the segment forum as the segment forum deems appropriate.
2. The request to form a segment forum must include a proposed charter for the segment forum. The board must approve the charter.
3. NERC will provide notification of the formation of a segment forum to its membership roster. Notices and agendas of meetings shall be posted on NERC's Web site.
4. A segment forum may make recommendations to any of the NERC committees and may submit a standards authorization request to the NERC *Reliability Standards Development Procedure*.

## **SECTION 800 — RELIABILITY ASSESSMENT AND PERFORMANCE ANALYSIS**

### **801. Objectives of the Reliability Assessment and Performance Analysis Program**

The objectives of the NERC reliability assessment and performance analysis program are to: (1) conduct, and report the results of, an independent assessment of the overall reliability and adequacy of the interconnected North American bulk power systems, both as existing and as planned; (2) investigate and analyze off-normal events on the bulk power system; (3) identify the root causes of events that may be precursors of potentially more serious events; (4) assess past reliability performance for lessons learned; (5) disseminate findings and lessons learned to the electric industry to improve reliability performance; and (6) develop reliability performance benchmarks. The final reliability assessment reports shall be approved by the board for publication to the electric industry and the general public.

### **802. Scope of the Reliability Assessment Program**

1. The scope of the reliability assessment program shall include:
  - 1.1 Review, assess, and report on the overall electric generation and transmission reliability (adequacy and operating reliability) of the interconnected bulk power systems, both existing and as planned.
  - 1.2 Assess and report on the key issues, risks, and uncertainties that affect or have the potential to affect the reliability of existing and future electric supply and transmission.
  - 1.3 Review, analyze, and report on regional self-assessments of electric supply and bulk power transmission reliability, including reliability issues of specific regional concern.
  - 1.4 Identify, analyze, and project trends in electric customer demand, supply, and transmission and their impacts on bulk power system reliability.
  - 1.5 Investigate, assess, and report on the potential impacts of new and evolving electricity market practices, new or proposed regulatory procedures, and new or proposed legislation (e.g. environmental requirements) on the adequacy and operating reliability of the bulk power systems.
2. The reliability assessment program shall be performed in a manner consistent with the reliability standards of NERC including but not limited to those that specify reliability assessment requirements.

### **803. Reliability Assessment Reports**

The number and type of periodic assessments that are to be conducted shall be at the discretion of NERC. The results of the reliability assessments shall be documented in three reports: the long-term and the annual seasonal (summer) and the annual seasonal (winter) assessment reports. NERC shall also conduct special reliability assessments from time to time as circumstances warrant. The reliability assessment reports shall be reviewed and approved for publication by the board. The three regular reports are described below.

1. **Long-Term Reliability Assessment Report** — The annual long-term report shall cover a ten-year planning horizon. The planning horizon of the long-term reliability assessment report shall be subject to change at the discretion of NERC. Detailed generation and transmission adequacy assessments shall be conducted for the first five years of the review period. For the second five years of the review period, the assessment shall focus on the identification, analysis, and projection of trends in peak demand, electric supply, and transmission adequacy, as well as other industry trends and developments that may impact future electric system reliability. Reliability issues of concern and their potential impacts shall be presented along with any mitigation plans or alternatives. The long-term reliability assessment reports will generally be published in the fall (September) of each year. NERC will also publish electricity supply and demand data associated with the long-term reliability assessment report.
2. **Summer Assessment Report** — The annual summer seasonal assessment report typically shall cover the four-month (June–September) summer period. It shall provide an overall perspective on the adequacy of the generation resources and the transmission systems necessary to meet projected summer peak demands. It shall also identify reliability issues of interest and regional and subregional areas of concern in meeting projected customer demands and may include possible mitigation alternatives. The report will generally be published in mid-May for the upcoming summer period.
3. **Winter Assessment Report** — The annual winter seasonal assessment report shall cover the three-month (December–February) winter period. The report shall provide an overall perspective on the adequacy of the generation resources and the transmission systems necessary to meet projected winter peak demands. Similar to the summer assessment, the winter assessment shall identify reliability issues of interest and regional and subregional areas of concern in meeting projected customer demands and may also include possible mitigation alternatives. The winter assessment report will generally be published in mid-November for the upcoming winter period.
4. **Special Reliability Assessment Reports** — In addition to the long-term and seasonal reliability assessment reports, NERC shall also conduct special reliability assessments on a regional, interregional, and interconnection basis as conditions warrant, or as requested by board. The teams of reliability and technical experts also may initiate special assessments of key reliability issues and their impacts on

the reliability of a regions, subregions, or interconnection (or a portion thereof). Such special reliability assessments may include, among other things, operational reliability assessments, evaluations of emergency response preparedness, adequacy of fuel supply, hydro conditions, reliability impacts of new or proposed environmental rules and regulations, and reliability impacts of new or proposed legislation that affects or has the potential to affect the reliability of the interconnected bulk power systems in North America.

**804. Reliability Assessment Data and Information Requirements**

To carry out the reviews and assessments of the overall reliability of the interconnected bulk power systems, the regional reliability organizations and other entities shall provide sufficient data and other information requested by NERC in support of the annual long-term and seasonal assessments and any special reliability assessments.

Some of the data provided for these reviews and assessment may be considered confidential from a competitive marketing perspective or a critical energy infrastructure information perspective. The necessary safeguards shall remain in place to ensure that the assessment data is protected.

While the major sources of data and information for this program are the regional reliability organizations, a team of reliability and technical experts is responsible for developing and formulating its own independent conclusions about the near-term and long-term reliability of the bulk power systems.

In connection with the reliability assessment reports, requests shall be submitted to each of the regional reliability organizations for required reliability assessment data and other information, and for each region's self-assessment report. The timing of the requests will be governed by the schedule for the preparation of the assessment reports.

The regional self-assessments are to be conducted in compliance with NERC standards and the respective regional planning criteria. The team(s) of reliability and technical experts shall also conduct interviews with the regional reliability organizations as needed. The summary of the regional self-assessments that are to be included in the assessment reports shall follow the general outline identified in NERC's request. This outline may change from time to time as key reliability issues change.

In general, the regional reliability self-assessments shall address, among other areas, the following topics: demand and net energy for load; assessment of projected resource adequacy; any transmission constraints that may impact bulk transmission adequacy and plans to alleviate those constraints; any unusual operating conditions that could impact reliability for the assessment period; fuel supply adequacy; the deliverability of generation (both internal and external) to load; and any other reliability issues in the region and their potential impacts on the reliability of the bulk power systems.

### **805. Reliability Assessment Process**

Based on their expertise, the review of the collected data, the review of the regional self-assessment reports, and interviews with the regional reliability organizations, as appropriate, the teams of reliability and technical experts shall perform an independent review and assessment of the generation and transmission adequacy of each region's existing and planned bulk power system. The results of the review teams shall form the basis of NERC's long-term and seasonal reliability assessment reports. The review and assessment process is briefly summarized below.

1. **Resource Adequacy Assessment** — The teams shall evaluate the regional demand and resource capacity data for completeness in the context of the overall resource capacity needs of the region. The team shall independently evaluate the ability of the regional entity or regional reliability organization members to serve their obligations given the demand growth projections, the amount of existing and planned capacity, including committed and uncommitted capacity, contracted capacity, or capacity outside of the region. If the region relies on capacity from outside of the region to meet its resource objectives, the ability to deliver that capacity shall be factored into the assessment. The demand and resource capacity information shall be compared to the resource adequacy requirements of the regional entity or regional reliability organization for the year(s) or season(s) being assessed. The assessment shall determine if the resource information submitted represents a reasonable and attainable plan for the regional entity or regional reliability organization and its members. For cases of inadequate capacity or reserve margin, the regional entity or regional reliability organization will be requested to analyze and explain any resource capacity inadequacies and its plans to mitigate the reliability impact of the potential inadequacies. The analysis may be expanded to include surrounding areas. If the expanded analysis indicates further inadequacies, then an interregional problem may exist and will be explored with the applicable regions. The results of these analyses shall be described in the assessment report.
2. **Transmission Adequacy and Operating Reliability Assessment** — The teams shall evaluate transmission system information that relates to the adequacy and operating reliability of the regional transmission system. That information shall include: regional planning study reports, interregional planning study reports, and/or regional operational study reports. If additional information is required, another data request shall be sent to the regional entity or regional reliability organization. The assessment shall provide a judgment on the ability of the regional transmission system to operate reliably under the expected range of operating conditions over the assessment period as required by NERC reliability standards. If sub-areas of the regional system are especially critical to the reliable operation of the regional bulk transmission system, these facilities or sub-areas shall be reviewed and addressed in the assessment. Any areas of concern related to the adequacy or operating reliability of the system shall be identified and reported in the assessment.

3. **Seasonal Operating Reliability Assessment** — The team(s) shall evaluate the overall operating reliability of the regional bulk transmission systems. In areas with potential resource adequacy or system operating reliability problems, operational readiness of the affected regional reliability organizations for the upcoming season shall be reviewed and analyzed. The assessment may consider unusual but possible operating scenarios and how the system is expected to perform. Operating reliability shall take into account a wide range of activities, all of which should reinforce the regional entity's or regional reliability organization's ability to deal with the situations that might occur during the upcoming season. Typical activities in the assessment may include: facility modifications and additions, new or modified operating procedures, emergency procedures enhancement, and planning and operating studies. The teams shall report the overall seasonal operating reliability of the regional transmission systems in the annual summer and winter assessment reports.
4. **Reporting of Reliability Assessment Results**
  - 4.1 The teams of reliability and technical experts shall provide an independent assessment of the reliability of the regional reliability organizations and the North American interconnected bulk power system for the period of the assessment. While the regional reliability organizations are relied upon to provide the information to perform such assessments, the review team is not required to accept the conclusions provided by the regional reliability organizations. Instead, the review team is expected, based on their expertise, to reach their own independent conclusions about the status of the adequacy of the generation and bulk power transmission systems of North America.
  - 4.2 The review team also shall strive to achieve consensus in their assessments. The assessments that are made are based on the best information available at the time. However, since judgment is applied to this information, legitimate differences of opinion can develop. Despite these differences, the review team shall work to achieve consensus on their findings.
  - 4.3 In addition to providing long-term and seasonal assessments in connection with the reliability assessment program, the review team of experts shall also be responsible for recommending new and revised reliability standards related to the reliability assessments and the reliability of the bulk power systems. These proposals for new or revised standards shall be entered into NERC's Standards Development Process.
  - 4.4 Upon completion of the assessment, the team shall share the results with the regional reliability organizations. The regional reliability organizations shall be given the opportunity to review and comment on the conclusions in the assessment and to provide additional information as appropriate. The reliability assessments and their conclusions are the responsibility of NERC's technical review team and NERC.

- 4.5 The preparation and approval of NERC's reliability assessment reports shall follow a prescribed schedule including review, comment, and possible approval by appropriate NERC committees. The long-term and seasonal (summer and winter) reliability assessment reports shall be further reviewed for approval by the board for publication to the electric industry.

**806. Scope of the Reliability Performance and Analysis Program**

The components of the program will include investigations of large-scale outages, disturbances, and near misses to determine root causes and lessons learned; identification and continuous monitoring of performance indices to detect emerging trends and signs of a decline in reliability performance; and communications of performance results, trends, recommendations, and initiatives to those responsible to take actions; followed with confirmation of actions to correct any deficiencies identified. Within NERC, the reliability performance program will provide performance results to the standards development, compliance enforcement, and reliability readiness programs to make the necessary adjustments to preserve reliability based on a risk-based approach. Recommendations that result from this program are reviewed as part of the NERC readiness audit and improvement program.

**807. Analysis of Major Events**

Responding to major blackouts and other system disturbances can be divided into four phases: situational assessment and communications; situation tracking and communications; investigation, analysis, and reporting; and follow-up on recommendations.

1. NERC's role following a blackout or other major bulk power system disturbance or emergency is to provide leadership, coordination, technical expertise, and assistance to the industry in responding to the event. Working closely with the regional reliability organizations and reliability coordinators, NERC will coordinate and facilitate efforts among industry participants, and with state, federal, and provincial governments in the United States and Canada to support the industry's response.
2. When responding to any event where physical or cyber security is suspected as a cause or contributing factor to an event, NERC will immediately notify appropriate government agencies and coordinate its investigation with them.
3. During the conduct of some NERC investigations, assistance may be needed from government agencies. This assistance could include: authority to require data reporting from affected or involved parties; communications with other agencies of government; investigations related to possible criminal or terrorist involvement in the event; resources for initial data gathering immediately after the event; authority to call meetings of affected or involved parties; and technical and analytical resources for studies.



4. NERC shall work with other participants to establish a clear delineation of roles, responsibilities, and coordination requirements among industry and government for the investigation and reporting of findings, conclusions, and recommendations related to major blackouts, disturbances, or other emergencies affecting the bulk power system.
5. NERC and applicable regional reliability organizations shall apply the *NERC Blackout and Disturbance Response Procedures*, which are incorporated into these rules as **Appendix 8**. These procedures provide a framework to guide NERC's response to events that may have multiregional, national, or international implications. Experienced industry leadership shall be applied to tailor the response to the specific circumstances of the event.

**808. Analysis of Off-Normal Events and System Performance**

1. NERC shall investigate and analyze system and equipment performance events that do not raise the level of a major blackout. The purpose of these reviews is to identify the root causes of events that may be precursors of potentially more serious events, to assess past reliability performance for lessons learned, and to develop reliability performance benchmarks.
2. NERC will screen and analyze events for significance, and those with generic applicability will be disseminated to the industry in the form of operating experience reports, significant event reports, or significant event notifications.
3. Members of NERC and bulk power systems owners, operators, and users shall provide NERC with detailed and timely operating experience information, and shall evaluate and take appropriate action on recommendations provided by NERC.

**809. Reliability Benchmarking**

NERC shall identify and track key reliability indicators as a means of benchmarking reliability performance and measuring reliability improvements. This program will include assessing available metrics, developing guidelines for acceptable metrics, maintaining a performance metrics "dashboard" on the NERC Web site, and developing appropriate reliability performance benchmarks.

**810. Information Exchange**

NERC shall disseminate the results of its events analysis findings and lessons learned to the industry. Recommendations that result from this program will be reviewed as part of the readiness audit and improvement program and also be used to guide the reliability assessment program.

**811. Equipment Performance Data**

Through its Generating Availability Data System (GADS), NERC shall collect operating information about the performance of electric generating equipment; provide assistance to those researching information on power plant outages stored in its database; and support equipment reliability as well as availability analyses and other decision-making

processes developed by GADS subscribers. GADS data is also used in conducting assessments of generation resource adequacy.

## **SECTION 900 — TRAINING AND EDUCATION**

### **901. Scope of the Training and Education Program**

Maintaining the reliability of the bulk electric system through implementation of the Reliability Standards requires informed and trained personnel. The training and education program will provide the education and training necessary for bulk power system personnel and regulators to obtain the essential knowledge necessary to understand and operate the bulk electric system.

NERC shall develop and maintain training and education programs for the purpose of establishing training requirements, developing materials, and developing training activities. The target audience of the training and education programs shall be bulk power system operating personnel including system operations personnel, operations support personnel (engineering and information technology), supervisors and managers, training personnel, and other personnel directly responsible for complying with NERC reliability standards who, through their actions or inactions, may impact the real-time, or day-ahead reliability of the bulk power system.

NERC shall also develop and provide appropriate training and education for industry participants and regulators affected by new or changed reliability standards or compliance requirements.

To accomplish those objectives:

1. NERC shall periodically conduct job task analyses for targeted bulk power system personnel to ensure that the training program content is properly aligned to the job tasks performed by those personnel.
2. NERC shall develop and maintain personnel training program curriculum requirements based on valid job-task analysis.
3. NERC shall periodically conduct performance surveys to determine the effectiveness of the training program and identify areas for further training development and improvement.
4. NERC shall develop training and education materials and activities to assist bulk power system entities implementing new or revised reliability standard requirements or other NERC-related changes.
5. NERC shall develop and provide auditor training to people who participate in NERC and regional entity audits and investigations for the compliance enforcement program, organization certification program, reliability readiness audit program, and the continuing education program.

### **902. Continuing Education Program**

NERC shall develop and maintain a continuing education program to foster the improvement of training and to promote quality in the training programs used by and

implemented by bulk power system entities. The program shall approve or accredit those activities and entities meeting NERC continuing education requirements.

1. NERC shall develop and implement continuing education program requirements that promote excellence in training programs and advance improved performance for bulk system personnel identified in Section 901.
2. NERC shall develop and maintain a process to approve or accredit continuing education providers and activities seeking approval or accreditation and meeting NERC-approved continuing education requirements.
3. NERC shall perform periodic audits on continuing education providers and training activities to ensure that the approved or accredited providers and training activities satisfy NERC continuing education requirements.
4. NERC shall develop and maintain an appeals process for disputed application reviews, interpretations of guidelines and standards, probation or suspension of NERC-approved provider status, or continuing education hour disputes.

## **SECTION 1000 — SITUATION AWARENESS AND INFRASTRUCTURE SECURITY**

### **1001. Situation Awareness**

NERC shall through the use of reliability coordinators and available tools, monitor present conditions on the bulk power system and provide leadership coordination, technical expertise, and assistance to the industry in responding to events as necessary. To accomplish these goals, NERC will:

1. Maintain real-time situation awareness of conditions on the bulk power system;
2. Notify the industry of significant bulk power system events that have occurred in one area, and which have the potential to impact reliability in other areas;
3. Maintain and strengthen high-level communication, coordination, and cooperation with governments and government agencies regarding real-time conditions; and
4. Enable the reliable operation of interconnected bulk power systems by facilitating information exchange and coordination among reliability service organizations.

### **1002. Reliability Support Services**

NERC will provide tools and other support services for the benefit of reliability coordinators and other system operators, including the Area Control Error (ACE) and Frequency Monitoring System, NERC Hotline, Real-time Flows, System Data Exchange (SDX), Reliability Coordinator Information System (RCIS), Transmission Services Information Network (TSIN), Interchange Distribution Calculator (IDC), Interregional Security Network (ISN), and Central Repository for Security Events (CRC). To accomplish this goal, NERC will:

1. Maintain the reliability and effectiveness of all mission-critical operating reliability support systems and services;
2. Continue to support maintenance of a transmission provider curtailment report on the CRC site in response to Federal Energy Regulatory Commission Order 605;
3. Investigate and analyze the use of high-speed real-time system measurements, including phasors, in predicting the behavior and performance of the Eastern Interconnection; and
4. Facilitate real-time voice and data exchange services among reliability coordinators (e.g., Hotline, Interregional Security Network, NERCnet, System Data Exchange, etc.).

### **1003. Infrastructure Security Program**

NERC shall coordinate electric industry activities to promote critical infrastructure protection of the bulk power system in North America by taking a leadership role in

critical infrastructure protection of the electricity sector so as to reduce vulnerability and improve mitigation and protection of the electricity sector's critical infrastructure. To accomplish these goals, NERC shall perform the following functions.

1. Electric Sector Information Sharing and Analysis Center (ESISAC)
  - 1.1 NERC shall serve as the electricity sector's Sector Coordinator and operate its Information Sharing and Analysis Center to gather information and communicate security-related threats and incidents within the sector, with United States and Canadian government agencies, and with other critical infrastructure sectors.
  - 1.2 NERC shall improve the capability of the ESISAC to analyze security threats and incident information and provide situational assessments for the electricity sector and governments.
  - 1.3 NERC shall work closely with the United States Department of Homeland Security, Department of Energy, Natural Resources Canada, and Public Safety and Emergency Preparedness Canada.
  - 1.4 NERC shall strengthen and expand these functions and working relationships with the electricity sector, other critical infrastructure industries, governments, and government agencies throughout North America to ensure the protection of the infrastructure of the bulk power system.
  - 1.5 NERC shall fill the role of the Electricity Sector Coordinating Council and coordinate with the Government Coordinating Council.
  - 1.6 NERC shall coordinate with other critical infrastructure sectors through active participation with the other Sector Coordinating Councils, the other ISACs, and the National Infrastructure Advisory Committee.
  - 1.7 NERC shall encourage and participate in coordinated critical infrastructure protection exercises, including interdependencies with other critical infrastructure sectors.
2. Security Planning
  - 2.1 NERC shall take a risk management approach to critical infrastructure protection, considering probability and severity, and recognizing that mitigation and recovery can be practical alternatives to prevention.
  - 2.2 NERC shall keep abreast of the changing threat environment through collaboration with government agencies.

- 2.3 NERC shall develop criteria to identify critical physical and cyber assets, assess security threats, identify risk assessment methodologies, and assess effectiveness of physical and cyber protection measures.
- 2.4 NERC shall enhance and maintain the bulk power system critical spare transformer program, encourage increased participation by asset owners, and continue to assess the need to expand this program to include other critical bulk power system equipment.
- 2.5 NERC shall support implementation of the Cyber Security Standard through education and outreach.
- 2.6 NERC shall review and improve existing Security Guidelines, develop new Security Guidelines to meet the needs of the electricity sector, and consider whether any guidelines should be developed into standards.
- 2.7 NERC shall conduct education and outreach initiatives to increase awareness and respond to the needs of the electricity sector.
- 2.8 NERC shall strengthen relationships with federal, state, and provincial government agencies on critical infrastructure protection matters.
- 2.9 NERC shall maintain and improve mechanisms for the sharing of sensitive or classified information with federal, state, and provincial government agencies on critical infrastructure protection matters; work with DOE and DHS to implement the National Infrastructure Protection Plan, as applicable to the electricity sector; and coordinate this work with PSEPC.
- 2.10 NERC shall improve methods to better assess the impact of a possible physical attack on the bulk power system and means to deter, mitigate, and respond following an attack.
- 2.11 NERC shall assess the results of vulnerability assessments and enhance the security of System Control and Data Acquisition (SCADA) and process control systems by developing methods to detect an emerging cyber attack and the means to mitigate impacts on the bulk power systems.
- 2.12 NERC shall work with the National SCADA Test Bed and the Process Control Systems Forum to accelerate the development of technology that will enhance the security, safety, and reliability of process control and SCADA systems.

## **SECTION 1100 — ANNUAL NERC BUSINESS PLANS AND BUDGETS**

### **1101. Scope of Business Plans and Budgets**

The board shall determine the content of the budgets to be submitted to the applicable ERO governmental authorities with consultation from the members of the Members Representatives Committee, regional entities, and others in accordance with the bylaws. The board shall identify any activities outside the scope of NERC's reliability functions, if any, and the appropriate funding mechanisms for those activities.

### **1102. NERC Funding and Cost Allocation**

1. In order that NERC's costs shall be fairly allocated among interconnections and among regional entities, the NERC funding mechanism for all statutory functions shall be based on net energy for load (NEL).
2. NERC's costs shall be allocated so that all load (or, in the case of costs for an interconnection or regional entity, all load within that interconnection or regional entity) bears an equitable share of such costs.
3. Costs shall be equitably allocated between countries or regional entities thereof for which NERC has been designated or recognized as the electric reliability authority.
4. Costs incurred to accomplish the statutory functions for one interconnection, regional entity, or group of entities will be directly assigned to that interconnection, regional entity, or group of entities provided that such costs are allocated equitably to end-users based on net energy for load.

### **1103. NERC Budget Development**

1. The NERC annual budget process shall be initiated in March of each calendar year thereby allowing a sufficient amount of time for NERC to receive member inputs, develop the budget, and receive board and, where authorized by applicable legislation or agreement, ERO governmental authority approval of the NERC budget for the following fiscal year.
2. The NERC budget submittal to governmental authorities shall include provisions for all ERO functions, all regional entity delegated functions as specified in delegation agreements and reasonable reserves and contingencies.
3. NERC shall develop, in consultation with the regional entities, a reasonable and consistent system of accounts, to allow a meaningful comparison of actual results at the NERC and regional entity level by the applicable ERO governmental authorities.



**1104. Submittal of Regional Entity Budgets to NERC**

1. Each regional entity shall submit its annual budget for carrying out its delegated authority functions as well as all other activities and funding to NERC no later than June 1 of the prior year, together with supporting materials including their complete business plan and organization chart, explaining the proposed collection of all dues, fees, and charges and the proposed expenditure of funds collected in sufficient detail to justify the requested funding collection and budget expenditures.
2. NERC shall review and approve each regional entity's budget for adequacy in meeting requirements of its delegated authority. NERC will presume each regional entity's budget is reasonable if their governing body has approved the budget for submission to NERC. Concurrent with approving the NERC budget, NERC shall review and approve, or reject, each regional entity budget for filing.
3. NERC shall also have the right to review from time to time, in reasonable intervals but no less than every three years, the financial books and records of each regional entity having delegated authority in order to ensure that the documentation fairly represents in all material respects appropriate funding of delegated functions.

**1105. Submittal of NERC and Regional Entity Budgets to Governmental Authorities for Approval**

1. NERC shall file for approval by the applicable ERO governmental authorities at least 130 days in advance of the start of each fiscal year. The filing shall include: (1) the complete NERC and regional entity budgets including the business plans and organizational charts approved by the board, (2) NERC's annual funding requirement (including regional entity costs for delegated functions), (3) the previous year's audited financial statements, and (4) the mechanism for assessing charges to recover that annual funding requirement, together with supporting materials in sufficient detail to support the requested funding requirement.
2. NERC shall seek approval from each governmental authority requiring such approval for the funding requirements necessary to perform ERO activities within their jurisdictions.

**1106. NERC and Regional Entity Billing and Collections**

1. NERC shall request the regional entities to identify all load-serving entities<sup>3</sup> within each regional entity and the NEL assigned to each load-serving entity, and the regional entities shall supply the requested information. The assignment of a funding requirement to an entity shall not be the basis for determining that the entity must be registered in the compliance registry.

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<sup>3</sup> A regional entity shall allocate funding obligations using a NERC-approved alternative method, as stated in the regional delegation agreement.

2. NERC shall accumulate the NEL by load-serving entities for each ERO governmental authority and submit the proportional share of NERC funding requirements to each ERO governmental authority for approval together with supporting materials in sufficient detail to support the requested funding requirement.
3. NEL reported by balancing authorities within a region shall be used to rationalize and validate amounts allocated for collection through regional entity or regional reliability organization processes.
4. The billing and collection processes shall provide:
  - 4.1 A clear validation of billing and application of payments.
  - 4.2 A minimum of data requests to those being billed.
  - 4.3 Adequate controls to ensure integrity in the billing determinants including identification of entities subject to NERC's authority.
  - 4.4 Consistent billing and collection terms.
5. NERC will bill and collect all budget requirements approved by applicable ERO governmental authorities (including the funds required to support those functions assigned to the regional entities through the delegation agreements) directly from the load-serving entities or as directed by particular ERO governmental authorities, except where the regional entity is required to collect the budget requirements for NERC, in which case the regional entity will collect directly from the load-serving entities or as otherwise provided by agreement and submit funds to NERC. Alternatively, a load-serving entity may pay its allocated ERO costs through a regional entity managed collection mechanism.
6. NERC shall set a minimum threshold limit on the billing of small LSEs to minimize the administrative burden of collection.
7. NERC shall pursue any non-payments and shall request assistance from applicable governmental authorities as necessary to secure collection.
8. Both NERC and the regional entities also may bill members or others for functions and services not within statutory requirements or otherwise authorized by the appropriate governmental authorities. Costs and revenues associated with these functions and services shall be separately identified and not commingled with billings associated with the funding of NERC or of the regional entities for delegated activities.

**1107. Penalty Applications**

1. The entity that initiates an investigation that leads to the imposition of a penalty shall receive any penalty monies that result from that investigation.

2. All funds from financial penalties assessed in the United States received by the entity initiating the investigation shall be applied as a general offset to the entity's budget requirements for the subsequent fiscal year. Funds from financial penalties shall not be directly applied to any program maintained by the investigating entity. Funds from financial penalties assessed against a Canadian entity shall be applied as specified by legislation or agreement.
3. In the event that an investigation is performed jointly by NERC and a regional entity, the regional entity shall receive the penalty monies and offset the entity's budget requirements for the subsequent fiscal year.
4. Exceptions to the policy due to statutory or regulatory restrictions will be considered on a case-by-case basis.

**1108. Special Assessments**

On a demonstration of unforeseen and extraordinary circumstances requiring additional funds prior to the next funding cycle, NERC shall file with the applicable ERO governmental authorities, where authorized by applicable legislation or agreement, for authorization to collect a special assessment for statutory functions. Such filing shall include supporting materials to justify the requested funding, including any departure from the approved funding formula or method.

## **SECTION 1200 — REGIONAL DELEGATION AGREEMENTS**

### **1201. Pro Forma Regional Delegation Agreement**

NERC shall develop and maintain a pro forma regional entity delegation agreement, which shall serve as the basis for negotiation of consistent agreements for the delegation of ERO functions to regional entities.

### **1202. Regional Entity Essential Requirements**

NERC shall establish the essential requirements for an entity to become qualified and maintain good standing as a regional entity.

### **1203. Negotiation of Regional Delegation Agreements**

NERC shall, for all areas of North America that have provided NERC with the appropriate authority, negotiate regional delegation agreements for the purpose of ensuring all areas of the North American bulk power systems are within a regional entity area. In the event NERC is unable to reach agreement with regional entities for all areas, NERC shall provide alternative means and resources for implementing NERC functions within those areas. No delegation agreement shall take effect until it has been approved by the appropriate ERO governmental authority.

### **1204. Conformance to Rules and Terms of Regional Delegation Agreements**

NERC and each regional entity shall comply with all applicable ERO rules of procedure and the obligations stated in the regional delegation agreement.

### **1205. Sub-delegation**

The regional entity shall not sub-delegate any responsibilities and authorities delegated to it by its regional delegation agreement with NERC.

### **1206. Nonconformance to Rules or Terms of Regional Delegation Agreement**

If a regional entity is unable to comply or is not in compliance with an ERO rule of procedure or the terms of the regional delegation agreement, the regional entity shall immediately notify NERC in writing, describing the area of nonconformance and the reason for not being able to conform to the rule. NERC shall evaluate each case and inform the affected regional entity of the results of the evaluation. If NERC determines that a rule or term of the regional delegation agreement has been violated by an entity or cannot practically be implemented by an entity, NERC shall notify the applicable ERO governmental authorities and take any actions necessary to address the situation.

### **1207. Regional Entity Audits**

Approximately every three years and more frequently if necessary for cause, NERC shall audit each regional entity to verify that the regional entity continues to comply with NERC rules of procedure and the obligations of NERC delegation agreement.

## **SECTION 1300 — COMMITTEES**

### **1301. Establishing Standing Committees**

The board may from time to time, create standing committees. In doing so, the board shall approve the charter of each committee and assign specific authority to each committee necessary to conduct business within that charter. Each standing committee shall work within its board-approved charter and shall be accountable to the board for performance of its board-assigned responsibilities. A NERC standing committee may not delegate its assigned work to a member forum, but, in its deliberations, may request the opinions of and consider the recommendations of a member forum.

### **1302. Committee Membership**

Each committee shall have a defined membership composition that is explained in its charter. Committee membership may be unique to each committee, and can provide for balanced decision-making by providing for representatives from each sector, or by bringing together a wide diversity of opinions from industry experts with outstanding technical knowledge and experience in a particular subject area. Committee membership shall also provide the opportunity for an equitable number of members from the United States and Canada, based approximately on proportionate net energy for load. Committees that are established on a sector basis must ensure that no two stakeholder sectors are able to control the vote on any matter, and no single sector is able to defeat a matter.

### **1303. Procedures for Appointing Committee Members**

Committee members shall be nominated and selected in a manner that is open, inclusive, and fair. Unless otherwise stated in these rules or approved by the board, all committee member appointments shall be approved by the board, and committee officers shall be appointed by the Chairman of the Board.

### **1304. Procedures for Conduct of Committee Business**

1. Notice to the public of the dates, places, and times of meetings of all committees, and all nonconfidential material provided to committee members, shall be posted on the Corporation's Web site at approximately the same time that notice is given to committee members. Meetings of all standing 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 enforcement matters, litigation, or commercially sensitive or critical infrastructure information of any entity.
2. NERC shall maintain a set of procedures, approved by the board, to guide the conduct of business by standing committees.

**1305. Committee Subgroups**

Standing committees may appoint subgroups using the same principles as in Section 1302.

## **SECTION 1400 — AMENDMENTS TO THE NERC RULES OF PROCEDURE**

### **1401. Proposals for Amendment or Repeal of Rules of Procedure**

In accordance with the bylaws of NERC, requests to amend or repeal the rules of procedure may be submitted by (1) any ten members of NERC, which number shall include members from at least three membership segments, (2) the Member Representatives Committee, (3) a standing committee of NERC to whose function and purpose the rule pertains, or (4) an officer of the ERO.

### **1402. Approval of Amendment or Repeal of Rules of Procedure**

Amendment to or repeal of rules of procedure shall be approved by the board after public notice and opportunity for comment in accordance with the bylaws of NERC. In approving changes to the rules of procedure, the board shall consider the inputs of the Member Representatives Committee, other ERO committees affected by the particular changes to the rules, and other stakeholders as appropriate. After board approval, the amendment or repeal shall be submitted to the ERO governmental authorities for approval, where authorized by legislation or agreement. No amendment to or repeal of the rules of procedure shall be effective until it has been approved by the applicable ERO governmental authorities.

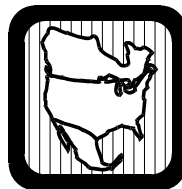
# Reliability Standards Development Procedure

## Draft Version 5.0

**Draft Version 5 of the Reliability Standards Development Procedure has been prepared to allow NERC to transition to become the ERO.**

**The draft is subject to approval by stakeholders and the NERC Board of Trustees. NERC plans to file the final approved procedure after the August 2, 2006 board meeting.**

North American Electric Reliability Council



December 8, 2005



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## **Executive Summary**

### **Purpose**

This procedure defines the characteristics of a reliability standard of the North American Electric Reliability Council (NERC) and establishes the process for developing consensus to approve, revise, reaffirm, and withdraw such standards. NERC reliability standards apply to the reliability planning and reliable operation of the Bulk Electric Systems of North America.

### **Authority**

This procedure is published by the authority of the NERC Board of Trustees, who shall have the sole authority to modify the procedure. The Board of Trustees, as necessary to maintain NERC's certification as the electric reliability organization, may file the procedure with applicable regulatory authorities. A process for revising the procedure is provided in the section titled Maintenance of Reliability Standards Development Procedure.

### **Background**

NERC is a nonprofit corporation formed as a result of the Northeast blackout in 1965 to promote the reliability of the Bulk Electric Systems of North America. NERC serves as the electric reliability organization for North America, including the continental United States and Canada and northern Baja region of Mexico.

NERC works with all stakeholder segments of the electric industry, including electricity users, to develop standards for the reliable planning and operation of Bulk Electric Systems. Historically, NERC standards were effectively applied on a voluntary basis. The Energy Policy Act of 2005 provided a framework to make the standards mandatory for all Bulk Electric System owners, operators, and users in the United States. Similar authorities are provided in Canada by provincial regulators.

While NERC reliability standards are intended to promote reliability, they must at the same time accommodate competitive electricity markets. Reliability is a necessity for electricity markets, and robust electricity markets can support reliability.

## Principles

### Need for Guiding Principles

The NERC Board of Trustees has adopted reliability principles and market interface principles to define the purpose, scope, and nature of reliability standards. As these principles are fundamental to reliability and the market interface, these principles provide a constant beacon to guide the development of reliability standards. The Board of Trustees may modify these principles from time to time, as necessary, to adapt its vision for reliability standards.

Persons and committees that are responsible for the reliability standards process shall consider these principles in the execution of those duties.

### Reliability Principles

NERC reliability standards are based on certain reliability principles that define the foundation of reliability for North American Bulk Electric Systems. Each reliability standard shall enable or support one or more of the reliability principles, thereby ensuring that each standard serves a purpose in support of reliability of the North American Bulk Electric Systems. Each reliability standard shall also be consistent with all of the reliability principles, thereby ensuring that no standard undermines reliability through an unintended consequence.

### Market Interface Principles

Recognizing that Bulk Electric System reliability and electricity markets are inseparable and mutually interdependent, all reliability standards shall be consistent with the market interface principles. Consideration of the market interface principles is intended to ensure that reliability standards are written such that they achieve their reliability objective without causing undue restrictions or adverse impacts on competitive electricity markets.

## Reliability Standard Definition, Characteristics, and Elements

### Definition of a Reliability Standard

A reliability standard defines certain obligations or requirements of entities that operate, plan, and use the Bulk Electric Systems of North America. The obligations or requirements must be material to reliability and measurable. Each obligation and requirement shall support one or more of the stated reliability principles and shall be consistent with all of the stated reliability and market interface principles.

### Characteristics of a Reliability Standard

Reliability standards include standards for the operation and planning of interconnected systems, consistent with the reliability and market interface principles. The format and process defined by this procedure applies to all reliability standards.

A reliability standard shall have the following characteristics:

- **Material to reliability** — A reliability standard shall be material to the reliability of the Bulk Electric Systems of North America. If the reliability of the Bulk Electric Systems could be compromised without a particular standard or by a failure to comply with that standard, then the standard is material to reliability.
- **Measurable** — A reliability standard shall establish technical or performance requirements that can be practically measured.

Although reliability standards have a common format and process, several types of reliability standards may exist, each with a different approach to measurement:

- **Technical standards** related to the provision, maintenance, operation, or state of Bulk Electric Systems will likely contain measures of physical parameters and will often be technical in nature.
- **Performance standards** related to the actions of entities providing for or impacting the reliability of Bulk Electric Systems will likely contain measures of the results of such actions, or the nature of the performance of such actions.
- **Preparedness standards** related to the actions of entities to be prepared for conditions that are unlikely to occur but are critical to reliability will likely contain measures of such preparations or the state of preparedness, but measurement of actual outcomes may occur infrequently or never.
- **Organization certification standards** define the essential capabilities to perform reliability functions. Such standards are used to credential organizations that have the requisite capabilities.

### Elements of a Reliability Standard

A reliability standard shall consist of the elements shown in the reliability standard template. These elements are intended to apply a systematic discipline in developing and revising reliability standards. This discipline is necessary to achieve standards that are measurable, enforceable, and consistent. The format allows a clear statement of the purpose, requirements, measures, and compliance elements associated with each standard.

All mandatory requirements of a reliability standard shall be within an element of the standard. Supporting documents to aid in the implementation of a standard may be referenced by the standard but are not part of the standard itself. Types of supporting documents are described in a later section of the procedure.

**Performance Elements of a Reliability Standard**

<b>Identification Number</b>	A unique identification number assigned in accordance with a published classification system to facilitate tracking and reference to the standards.
<b>Title</b>	A brief, descriptive phrase identifying the topic of the standard.
<b>Effective Date and Status</b>	The effective date of the standard or, prior to approval of the standard by regulatory authorities, the proposed effective date. The status of the standard will be indicated as active or by reference to one of the numbered steps in the standards process.
<b>Purpose</b>	The purpose of the standard shall explicitly state what outcome will be achieved by the adoption of the standard. The purpose is agreed to early in the process as a step toward obtaining approval to proceed with the development of the standard. The purpose should link the standard to the relevant principle(s).
<b>Applicability</b>	Define entities responsible for complying with the standard and any qualifying limitations of that applicability.
<b>Requirement(s)</b>	Explicitly stated technical, performance, and preparedness requirements. Each requirement identifies who is responsible and what action is to be performed or what outcome is to be achieved. Each statement in the requirements section shall be a statement for which compliance is mandatory. Any additional comments or statements for which compliance is not mandatory, such as background or explanatory information, should be placed in a separate document and referenced (See Supporting References.)
<b>Risk Factors</b>	<p>The potential reliability significance of each requirement, designated as a High, Medium or Low Risk Factor in accordance with the criteria listed below:</p> <p>A Low Risk Factor requirement is administrative in nature. Violation of a Low Risk Factor requirement would not be expected to affect the electrical state or capability of the Bulk Electric System, or the ability to effectively monitor and control the bulk electric system.</p> <p>A Medium Risk Factor requirement could directly affect the electrical state or the capability of the Bulk Electric System, or the ability to effectively monitor and control the Bulk Electric System. However, violation of a Medium Risk Factor requirement is unlikely to lead to Bulk Electric System instability, separation, or cascading failures.</p> <p>A High Risk Factor requirement is one that, if violated, could directly cause or contribute to Bulk Electric System instability, separation, or a cascading sequence of failures, or could place the Bulk Electric System at an unacceptable risk of instability, separation, or cascading failures.</p> <p>Because preparedness requirements, such as providing a valid restoration plan, are essential for reliability but may be used infrequently, performance may not</p>

	be directly observable through compliance monitoring. Risk Factors for preparedness requirements should consider the potential impacts during the emergency, abnormal, or restorative conditions anticipated by the requirement.
<b>Measure(s)</b>	Each requirement shall be addressed by one or more measures. Measures are used to assess performance and outcomes for the purpose of determining compliance with the requirements stated above. Each measure will identify to whom the measure applies and the expected level of performance or outcomes required to demonstrate compliance. Each measure shall be tangible, practical, and as objective as is practical. It is important to realize that measures are proxies to assess required performance or outcomes. Achieving the measure should be a necessary and sufficient indicator that the requirement was met. Each measure shall clearly refer to the requirement(s) to which it applies and each requirement shall clearly indicate which measure(s) apply to that requirement.

***Glossary of Terms Used in Standards***

<b>Definitions of Terms</b>	All defined terms used in reliability standards shall be defined in the glossary. All definitions must be developed and approved in accordance with the standards process.
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***Compliance Elements of a Standard***

<b>Compliance Monitoring Process</b>	<p>Defines for each measure:</p> <ul style="list-style-type: none"> <li>• The specific data or information that is required to measure performance or outcomes.</li> <li>• The entity that is responsible to provide the data or information for measuring performance or outcomes.</li> <li>• The process that will be used to evaluate data or information for the purpose of assessing performance or outcomes.</li> <li>• The entity that is responsible for evaluating data or information to assess performance or outcomes.</li> <li>• The time period in which performance or outcomes is measured, evaluated, and then reset.</li> <li>• Measurement data retention requirements and assignment of responsibility for data archiving.</li> </ul>
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**Supporting Information Elements**

<b>Interpretations</b>	Formal interpretations of the reliability standard are temporary, as the standard should be revised to incorporate the interpretation. Interpretations are developed through a process described in the section Interpretations of Standards.
<b>Supporting References</b>	This section will reference-related documents that support implementation of the reliability standard, but are not themselves mandatory. Examples include, but are not limited to: <ul style="list-style-type: none"><li>• Development history of the standard and prior versions.</li><li>• Subcommittee(s) responsible for the standard.</li><li>• Notes pertaining to implementation or compliance.</li><li>• Standard references.</li><li>• Standard supplements.</li><li>• Procedures.</li><li>• Practices.</li><li>• Training references.</li><li>• Technical references.</li><li>• White papers.</li><li>• Internet links to related information.</li></ul>



## **Roles in the Reliability Standards Development Process**

### **Nomination, Revision, or Withdrawal of a Standard**

Any member of NERC, including any member of a regional reliability organization, or group within NERC shall be allowed to request that a reliability standard be developed, modified, or withdrawn. Additionally, any person (organization, company, government agency, individual, etc.) who is directly and materially affected by the reliability of the North American Bulk Electric Systems shall be allowed to request a reliability standard be developed, modified, or withdrawn.

### **Process Roles**

**Board of Trustees** — The NERC Board of Trustees shall consider for adoption as reliability standards the standards that have been approved by a ballot pool. Once the board adopts a reliability standard, the board may file the standard with regulatory authorities to make the standard mandatory.

**Members Committee** — The NERC Members Committee shall advise the Board of Trustees on reliability standards presented for adoption by the board.

**Standards Committee** — The Standards Committee shall consist of two members of each of the stakeholder segments in the Registered Ballot Body. The Standards Committee shall meet at regularly scheduled intervals (either in person, or by other means) to consider which requests for new or revised standards should be assigned for development. The Standards Committee will manage the standards development process. The responsibilities of the Standards Committee will include: management of the standards work flow so as not to overwhelm available resources; review of standards authorization requests and draft standards for such factors as completeness, sufficient detail, rational result, and compatibility with existing standards; clarifying standard development issues not specified in this procedure; and advising the Board of Trustees on standard development matters. Under no circumstance will the Standards Committee change the substance of a draft standard. The standards process manager serves as secretary to the Standards Committee.

**Registered Ballot Body** — The Registered Ballot Body comprises all entities that:

1. Qualify for one of the stakeholder segments approved by the Board of Trustees<sup>1</sup>, and
2. Are registered with NERC as potential ballot participants in the voting on standards, and
3. Are current with any designated fees.

Each member of the Registered Ballot Body is eligible to participate in the voting process (and ballot pool) for each standard action.

**Ballot Pool** — Each standard action has its own ballot pool formed of interested members of the Registered Ballot Body. The ballot pool comprises those members of the Registered Ballot Body that respond to a pre-ballot survey for that particular standard action.

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<sup>1</sup> Appendix B contains a description of the latest version of the stakeholder segments approved by the Board of Trustees.

The ballot pool will ensure, through its vote, the need for and technical merits of a proposed standard action and the appropriate consideration of views and objections received during the development process. The ballot pool votes to approve each standards action.

**Standards Process Manager** — The reliability standards process shall be administered by a standards process manager. The standards process manager is responsible for ensuring that the development and revision of standards is in accordance with this procedure. The standards process manager works to ensure the integrity of the process and consistency of quality and completeness of the reliability standards. The standards process manager facilitates all steps in the process.

**Standards Process Staff** — NERC staff will assist the Standard Authorization Request (SAR) drafting teams and standard drafting teams.

**Subcommittees, Working Groups, and Task Forces** — The subcommittees, working groups, and task forces within NERC serve an active role in the standards process:

1. Initiate standards actions by developing SARs.
2. Post comments (views and objections) to standards actions.
3. Participate on standard drafting teams.
4. Assist in the implementation of approved standards.
5. Serve as industry spokespersons by encouraging others within their NERC region and stakeholder segment to participate in the standards development process.
6. Serve as industry monitors to assess the impact of a standard's implementation.
7. Provide technical oversight in response to changing industry conditions.
8. Identify the need for new standards.

**NERC and Regional Reliability Organization Members** — The members of NERC and the regional reliability organizations may initiate new or revised standards and may comment on proposed standards.

**Requester** — A requester is any person (organization, company, government agency, individual, etc.) that submits a complete request for development, revision, or withdrawal of a standard. Any person that is directly and materially affected by an existing standard or the need for a new standard may submit a request for a new standard or revision to a standard. The requester is assisted by the SAR drafting team (if one is appointed by the Standards Committee) to respond to comments and to decide if and when the SAR is forwarded to the Standards Committee with a request to draft a standard. The requester is responsible for the SAR, assisted by the SAR drafting team, until such time the Standards Committee authorizes development of the standard. The requester has the option at any time to allow the SAR drafting team to assume full responsibility for the SAR. The requester may choose to participate in subsequent standard drafting efforts related to the SAR.

**Compliance Enforcement Program** — The mission of the NERC compliance enforcement program is to manage and enforce compliance with NERC reliability standards. The development of a reliability standard, in particular the measures and compliance elements of the standard, shall have direct input from the compliance enforcement program. Field testing will also be coordinated with the compliance program. The compliance program director and appropriate working groups shall provide inputs and comments during the standards development process to ensure the measures will be effective and other aspects of the compliance enforcement program can be practically implemented.

**SAR Drafting Team** — A team of technical experts assigned to a SAR that:

- Assists in refining the SAR,
- Considers and responds to comments, and
- Participates in industry forums to help build consensus on the SAR.

**Standard Drafting Team** — A team of technical experts approved by the Standards Committee, that:

- Develops the details of the standard,
- Considers and responds to comments, and
- Participates in industry forums to help build consensus on posted draft standards.

**Joint Interface Committee (JIC)** — The JIC’s purpose is to ensure that the development of wholesale electric business practices and reliability standards is harmonized and that every effort is made to minimize duplication of effort between NERC and the North American Energy Standards Board (NAESB). The JIC is staffed by representatives of NERC, NAESB, and the ISO/RTO Council and is governed by the provisions of a Memorandum of Understanding executed by the three entities. The JIC will review all standards development proposals received by NERC and NAESB to determine whether NERC or NAESB should develop a particular standard. The JIC will also coordinate the annual work plans of the three organizations.

## Reliability Standards Consensus Development Process

### Overview

The process for developing and approving reliability standards is generally based on the procedures of the American National Standards Institute (ANSI) and other standards-setting organizations in the United States and Canada. The NERC process has the following characteristics:

- **Due process** — Any person with a direct and material interest has a right to participate by: a) expressing an opinion and its basis, b) having that position considered, and c) appealing if adversely affected.
- **Openness** — Participation is open to all persons who are directly and materially affected by North American Bulk Electric System reliability. There shall be no undue financial barriers to participation. Participation shall not be conditional upon membership in NERC or any organization, and shall not be unreasonably restricted on the basis of technical qualifications or other such requirements. All meetings of the Standards Committee and drafting teams shall be open and publicly noticed on the NERC Web site.
- **Balance** — The NERC standards development process shall have a balance of interests and shall not be dominated by any single interest category.

The NERC process is intended to develop consensus, on both the need for the standard, and the proposed standard itself. The process includes the following key elements:

- **Nomination of a proposed standard, revision to a standard, or withdrawal of a standard** using a Standard Authorization Request (SAR).
- **Public posting of the SAR** to allow all parties to review and provide comments on the need for the proposed standard and the expected outcomes and impacts from implementing the proposed standard. Notice of standards shall provide an opportunity for participation by all directly and materially affected persons.
- **Review of the public comments** in response to the SAR and prioritization of proposed standards, leading to the authorization to develop standards for which there is a consensus-based need.
- **Assignment of teams** to draft the new or revised standard.
- **Drafting of the standard.**
- **Public posting of the draft standard** to allow all parties to review and provide comments on the draft standard. Once the need for the standard has been established by a SAR, comments should focus on aspects of the draft standard itself.
- **Field-testing of the draft standard** and measures. The Standards Committee shall determine the need and extent of field testing, considering the recommendations of the NERC compliance program director and the standard drafting team. Field testing may be industry-wide or may consist of one or more lesser-scale demonstrations. Field testing should be cost effective and practical, yet sufficient to ensure clarity of the standard and to validate the requirements, measures, measurement processes, and other elements of the standard necessary to implement the compliance program. For some standards and their associated measures, field testing may not be appropriate, such as those measures that consist of administrative reports.

- **Formal balloting of the standard** for approval by the ballot pool, using the NERC Weighted Segment Voting Model.
- **Re-ballot to consider specific comments** by those submitting comments with negative votes.
- **Adoption by the Board of Trustees.**
- **An appeals mechanism** as appropriate for the impartial handling of substantive and procedural complaints regarding action or inaction related to the standards process.

The first three steps in the process serve to establish consensus on the need for the standard.

### **Step 1 — Request a Standard or Revision to an Existing Standard**

***Objective:** A valid SAR that clearly justifies the purpose and describes the scope of the proposed standard action and conforms to the requirements of a SAR outlined in Appendix A.*

***Sequence Considerations:** Submitting a valid SAR is the first step in proposing a standard action. A requester may prepare a draft of the proposed standard action (Step 5), which the Standards Committee may authorize for concurrent posting with the SAR. This could be useful for a standard action with a clearly defined and limited scope or one for which stakeholder consensus on the need and scope is likely. Complex standards where broad debate of issues is required should be presented in two stages – the SAR first to get agreement on the scope and purpose, and the standard later in Step 6.*

Requests to develop, revise, or withdraw<sup>2</sup> a reliability standard shall be submitted to the standards process manager by completing a SAR. The SAR is a description of the new or revised standard. The SAR provides sufficiently descriptive detail to clearly define the scope of the standard. The SAR also states the purpose of the standard. A needs statement will provide the detailed justification for the development or revision of the standard, including an assessment of the reliability and market interface impacts of implementing or not implementing the standard. SARs will be reviewed to ensure the subject matter is within the scope of NERC/ERO, and the potential for the SAR to lead to a useful and enforceable standard will be considered. Appendix A provides a sample of the information in a SAR. The standards process manager shall maintain this form and make it available electronically.

Any person or entity directly or materially affected by an existing standard or the need for a new or revised standard may initiate a SAR.

The requester will submit the SAR to the standards process manager electronically and the standards process manager will electronically acknowledge receipt of the SAR. The standards process manager will assist the submitting party in developing the SAR and verify that the SAR conforms to this procedure.

The standards process manager shall forward all properly completed SARs to the Standards Committee. The Standards Committee shall meet at established intervals to review all pending SARs. The frequency of this review process will depend on workload, but in no case shall a properly completed SAR wait for Standards Committee action more than 30 days from the date of receipt. This review will determine if the SAR is sufficiently stated to guide standard development and whether the SAR is consistent with

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<sup>2</sup> Actions in the remaining steps of the standards process apply to proposed new standards, revisions to existing standards, or withdrawal of existing standards, unless explicitly stated otherwise.

requirements in the procedure. The Standards Committee, guided by the reliability and market interface principles, may take one of the following actions:

- Remand the SAR back to the standards process manager for additional work. In this case, the standards process manager may request additional information for the SAR from the requester and will advise the requester of the Standards Committee's reasons for remanding the SAR within ten days of the action.
- Accept the SAR as a candidate for a new or revised standard, and authorize posting the SAR for stakeholder comment.
- Reject the SAR. If the Standards Committee rejects a SAR, it will provide a written explanation for rejection to the requester within ten days of the rejection decision.

If the Standards Committee accepts a SAR as a candidate for a new or revised standard, it may at its discretion appoint a SAR drafting team. The SAR drafting team would be tasked with assisting the requester in further developing the SAR and considering stakeholder comments on that SAR. The Standards Committee may also choose to allow the requester to perform these tasks.

If the Standards Committee remands or rejects a SAR, the requester may file an appeal following the appeals process provided in this procedure.

The status of SARs shall be tracked electronically. The SAR and its status shall be posted for public viewing including any actions or decisions.

## **Step 2 — Solicit Public Comments on the SAR**

***Objective:** Establish that there is stakeholder consensus on the need, scope and applicability of the requestor's proposed standard action.*

***Sequence Considerations:** A SAR may be posted only after completion of Step 1. A SAR may, at the discretion of the Standards Committee, be posted for comment concurrently with a draft standard (Step 6). In this case the draft standard would have a conditional status until the JIC assigns development of the standard to NERC.*

Once a SAR has been accepted by the Standards Committee as a candidate for developing a new or revised standard, the SAR will be posted for the purpose of soliciting public comments, as soon as practical as determined by the Standards Committee. SARs will be posted and publicly noticed at regularly scheduled intervals. Establishment of a regular time for posting of SARs will allow interested parties to know when to expect the next set of SARs.

Comments on the SARs will be accepted for at least a 30-day period from the notice of posting. Comments will be accepted online using an Internet-based application. The standards process manager will provide a copy of the comments to the requester and the SAR drafting team, if one has been appointed. Based on the comments, the requester may decide to submit the SAR for authorization to develop the standard, to withdraw the SAR, or to revise and resubmit it to the standards process manager for another posting, as soon as practical as determined by the Standards Committee. If appointed, the SAR drafting team shall assist the requester in reviewing comments, determining whether to continue or not, and making any necessary revisions for another posting.

The Standards Committee is responsible for the work flow of standards development. Based on the SAR priority, comments received, and an evaluation of available resources, the Standards Committee will determine the appropriate timing of postings after the initial SAR posting and comment period.

The requester, assisted by the SAR drafting team if one is appointed, shall give prompt consideration to the written views and objections of all participants. An effort to resolve all expressed objections shall be made and each objector shall be advised of the disposition of the objection and the reasons therefore. In addition, each objector shall be informed that an appeals procedure exists within the NERC standards process.

While there is no established limit on the number of times a SAR may be posted for comment, the Standards Committee retains the right to reverse its prior decision and reject a SAR if it believes continued revisions are not productive. Once again, the Standards Committee shall notify the requester in writing of the rejection following the appeals procedure.

During the SAR comment process, the requester may become aware of potential regional differences related to the proposed standard. To the extent possible, any regional differences or exceptions should be made a part of the SAR so that, if the SAR is authorized, such variations will be made a part of the draft new or revised standard.

The requester, up to this point in the development process, may elect to withdraw the request at any time. Once the Standards Committee authorizes development of a standard based on the SAR (Step 3) the requester may no longer withdraw the SAR, as it becomes the responsibility of the drafting team working on behalf of all stakeholders.

### **Step 3 — Authorization to Proceed With Drafting a New or Revised Standard**

***Objective:** Authorize development of a standard that is consistent with a SAR and for which there is stakeholder consensus on the need, scope, and applicability.*

***Sequence Considerations:** The Standards Committee may formally authorize the development of a standard action only after due consideration of SAR comments to determine there is consensus on the need, scope, and applicability of the proposed standard. This does not preclude, however, the requester from previously preparing a draft standard for consideration and the Standards Committee from authorizing a concurrent posting of the draft standard for comment along with the SAR. If a draft standard is posted for comment concurrently with the SAR, it is with the understanding that further development of the draft standard is conditioned on achieving stakeholder consensus through comments on the associated SAR and assignment of the standard by the JIC to NERC for development.*

After receiving public comments on the SAR, the requester may decide to submit the SAR to the Standards Committee for authorization to draft the standard. The Standards Committee reviews the comments received in response to the SAR and any revisions to the SAR.

Prior to authorizing a standard for development, the Standards Committee will coordinate the proposed standard request with the JIC and request that the JIC assign the standard to NERC for development. The Standards Committee may submit the SAR to the JIC for consideration at any time during Steps 1 or 2. The Standards Committee may initiate the formation of a standards drafting team while waiting for JIC action on the SAR.

The Standards Committee, once again considering the reliability and market interface principles and considering the public comments received and their resolution, may then take one of the following actions:

- Authorize drafting the proposed standard or revisions to a standard.
- Remand the SAR to the drafting committee and requester to respond to specified concerns of the Standards Committee.
- Reject the SAR with a written explanation to the requester and post that explanation.

If the Standards Committee rejects a SAR, the requester may file an appeal.

Once the Standards Committee authorizes development of the standard, the Standards Committee shall assign responsibility for the development of the standard to one or more drafting teams as appropriate. At that time, the requester no longer has responsibility for managing the standard request.

#### **Step 4 — Appoint Standard Drafting Team**

***Objective:** Appoint a standard drafting team that has the expertise, competencies, and diversity of views that are necessary to develop the standard.*

***Sequence Considerations:** The Standards Committee may appoint a standard drafting team concurrently with or after authorization of the development of a standard (Step 3).*

Once a SAR has been authorized for development of a standard by the Standards Committee, the Standards Committee shall determine the method for populating a standard drafting team. Typically, the Standards Committee would direct the conduct of a public nominations process to populate the standard drafting team. In some cases, the Standards Committee may appoint the members of the SAR drafting team or the requester to act as the standard drafting team. If this method of populating a drafting team is used, the Standards Committee shall still solicit additional members through a public solicitation of nominees and appoint additional members as needed.

The standards process manager shall post a request that interested parties complete a standard drafting team nomination form. Those individuals who complete and submit these self-nomination forms shall be considered for appointment to the associated standard drafting team. The standards process manager shall recommend a list of candidates for appointment to the team and shall submit the list to the Standards Committee. The Standards Committee may accept the recommendations of the standards process manager or may select other individuals to serve on the standard drafting team. This team shall consist of a group of people who collectively have the necessary technical expertise and work process skills. The Standards Committee shall appoint the standard drafting team, including its officers. The standards process manager shall assign staff personnel as needed to assist in drafting the standard.

The Standards Committee may, in lieu of open nominations, use the SAR drafting team (if one was appointed) or the requester as the standard drafting team. The Standards Committee should consider this option only if the necessary expertise, competencies, and diversity of views (to respond fairly to comments) is addressed. If the SAR drafting team or requester is not utilized as the standard drafting team, individuals associated with either may be nominated through the open process to join the standard drafting team.



Once it is appointed by the Standards Committee, the standard drafting team is responsible for making recommendations to the Standards Committee regarding the remaining steps in the standards process. The requestor may continue to assist the drafting team and participate in the standards process.

The Standards Committee may decide that more than one drafting team is required for a standard action and divide the SAR into multiple efforts. The Standards Committee may also supplement the membership of a standard drafting team at any time to ensure the necessary competencies and diversity of views are maintained throughout the standard development effort.

## **Step 5 — Draft New or Revised Standard**

**Objective:** *Develop a standard within the scope of the SAR.*

**Sequence Considerations:** *Generally, developing the draft standard follows the authorization by the Standards Committee (Step 3) and appointment of a standard drafting team (Step 4). Steps 5 and 6 may be iterated as necessary to consider stakeholder comments and build consensus on the draft standard.*

The appointed standard drafting team will develop a draft of the standard. In addition to drafting the text of the standard, development may include research, analysis, information gathering, testing, and other activities. The drafting of measures and compliance elements of the standard will be coordinated with the compliance program.

The drafting team may use a draft standard submitted by the requester as its initial draft, if one was submitted by the requester concurrently with the SAR.

Once the standard has been drafted, the standards process manager will review the standard for consistency of quality and completeness. The standards process manager will also ensure the draft standard is within the scope and purpose identified in the SAR. This review should occur within a thirty30-day period of the submittal of the draft standard. Once the standards process manager has completed this review, the new or revised standard will be submitted to the Standards Committee to request posting for public comment.

The Standards Committee should authorize posting of draft standards in a timely manner, but may consider priorities among various standards actions and the ability of stakeholders to review multiple actions at the same time. The Standards Committee will approve the posting and set the posting start and end dates.

If the standard drafting team determines that the scope of the SAR is inappropriate based on its own work and stakeholder comments, the team shall notify the Standards Committee. The drafting team may recommend reducing the scope of the standard to allow the effort to continue forward, while still remaining within the scope of the SAR. Reducing the scope defined in the SAR is acceptable if the drafting team finds, for instance, that additional technical research is needed prior to developing a portion of the standard or issues need to be resolved before consensus can be achieved on a portion of the standard. In this case, the drafting team shall provide detailed justification of need for reducing the scope. The Standards Committee, based on the drafting team recommendation and a review of stakeholder comments, will determine if the change in scope is acceptable.

If the standard drafting team determines it is necessary to expand the scope of the standard or to modify the scope in a way that is no longer consistent with the scope defined in the SAR, then the drafting team may initiate or recommend another requestor initiate a new SAR (Step 1) to develop the expanded or modified scope. At no time will a drafting team develop a standard that is not within the scope of the SAR that was authorized for development.

## **Step 6 — Solicit Public Comments on Draft Standard**

**Objective:** *Receive stakeholder inputs on the draft standard for the purpose of assessing consensus on the draft standard, and modifying the draft standard as needed to improve consensus.*

**Sequence Considerations:** *The posting of a draft standard will typically occur after the appointment of a standard drafting team and development of a draft by the team. Alternatively, a draft standard submitted by the requestor may be posted for comment concurrently with the associated SAR, with the condition that the SAR and draft standard meet the requirements of this procedure and are consistent with each other. In all cases, public comments on the draft standard must be solicited prior to Standards Committee approving the standard going to ballot (Step 9).*

Once the Standards Committee approves the posting of a draft standard and sets the posting start and end dates, the standards process manager will post the draft standard in the next regular posting interval for the purpose of soliciting public comments. The posting of the draft standard will be linked to the SAR for reference. Comments on the draft standard will be accepted for at least one 45-day period from the notice of posting. Additional posting periods may be set by the Standards Committee and shall be at least 30-days. Comments will be accepted online using an Internet-based application along with other electronic means as necessary.

Since the need for the standard was established by authorization of the SAR, comments at this stage should identify specific issues with the draft standard and propose alternative language. The comments may include recommendations to accept or reject the standard and reasons for that recommendation.

The drafting team shall develop an implementation plan for the standard to be posted with the standard for at least one stakeholder comment period. Once the implementation plan has been developed and posted for stakeholder comment, it shall remain part of the standard action for subsequent postings and shall be included on the ballot for the standard. The implementation plan shall describe when the standard will become effective. If the implementation is to be phased, the plan will describe which elements of the standard are to be applied to each class of responsible entities, and when. The plan will describe any deployment considerations unique to the standard, such as computer applications, measurement devices, databases, or training, as well as any other special steps necessary to prepare for and initially implement the standard.

## **Step 7 — Field Testing**

**Objective:** *Determine what testing is required to validate the concepts, requirements, measures, and compliance elements of the standard and implement that testing.*

**Sequence Considerations:** *Testing may be completed during or after Steps 1 through 6. Testing and associated analysis of results (Step 8) must be completed prior to determining whether to submit the standard to ballot (Step 9).*

Taking into consideration stakeholder comments received through Step 6, the standard drafting team may recommend to the Standards Committee that a test of one or more aspects of a standard is needed. The NERC compliance program director will also evaluate whether field-testing the compliance elements of the proposed new or revised standard is needed and advise the Standards Committee. The Standards Committee will approve all field tests of proposed standards based on the recommendations of the standard drafting team and the compliance program director. If needed, the Standards Committee will also request inputs on technical matters from applicable standing committees or other experts.

Once the field testing plan is approved, the standards process manager will, under the direction of the Standards Committee, oversee the field-testing the standard.

In some cases, measurement may be an administrative task and no field testing is required at all. In other cases, one or more limited-scale demonstrations may be sufficient. Comments may be solicited during the field-test period.

### **Step 8 — Analysis of the Comments and Field-Test Results**

***Objective:** Evaluate stakeholder comments and field-test results to determine if there is consensus that the proposed standard should go to ballot or requires additional work.*

***Sequence Considerations:** This step follows Steps 6 and 7 and must precede Step 9.*

The standards process manager will assemble the comments on the draft standard and distribute those comments to the standard drafting team and the requester. The standard drafting team, assisted by the requester, shall give prompt consideration to the written views and objections of all participants. An effort to resolve all expressed objections shall be made, and each objector shall be advised of the disposition of the objection and the reasons therefore, in addition to public posting of the responses. In addition, each objector shall be informed that an appeals process exists within the NERC standards process.

Based on comments received, the drafting team may determine there is an opportunity to improve consensus for the standard. In this case, the standard drafting team may elect to return to Step 5 and revise the draft for another posting. Although there is no predetermined limit on the number of times a draft standard may be revised and posted, the drafting team should ensure the potential benefits of another posting outweigh the burden on the drafting team and stakeholders. Returning to Step 5 to continue working on the standard is the prerogative of the drafting team, subject to Standards Committee oversight.

If the standard drafting team determines the draft standard is ready for ballot, the drafting team shall submit the draft standard to the Standards Committee with a request to proceed to balloting, along with the comments received and responses to the comments. Based on the comments received and field testing, the standard drafting team may include revisions that are not substantive. Substantive changes to a draft standard shall not be permitted between the last posting for stakeholder comment and submittal for ballot. A substantive change is one that directly and materially affects the effect or use of the standard. Any non-substantive changes made prior to going to ballot shall be identified to stakeholders at the time of the ballot notice.

When the Standards Committee receives a draft standard that is recommended for ballot, the Standards Committee will review the standard to ensure that the proposed standard is consistent with the scope of the SAR; addresses all of the objectives cited in Steps 1–8, as applicable; and is compatible with other existing standards. If the proposed standard does not pass this review, the Standards Committee shall remand the proposed standard to the standard drafting team to address the deficiencies. If the proposed

standard passes the review, the Standards Committee shall set the proposed standard for ballot as soon as the work flow will accommodate.

If the drafting team determines there is insufficient consensus to ballot the standard and that further work is unlikely to achieve consensus, the drafting team may recommend to the Standards Committee that the standard drafting be terminated and the SAR withdrawn. The Standards Committee will consider the recommendation of the drafting team and stakeholder comments and may terminate the standard drafting and accept the withdrawal of the SAR. If the Standards Committee believes the recommendation is unsubstantiated, the Standards Committee may direct other actions consistent with this procedure, such as requesting the drafting team to continue or appointing a new drafting team.

## **Step 9 — Ballot the New or Revised Standard**

***Objective:** Approve the proposed standard by vote of industry stakeholders.*

***Sequence Considerations:** The Standards Committee shall determine that all requirements of Steps 1 through 8 have been satisfactorily met before authorizing an action to go to ballot.*

### **Ballot Pool**

The standards process manager shall establish a ballot pool for a standard action at least 30- days prior to the start of a ballot. The standards process manager shall send a notice to every entity in the Registered Ballot Body. The purpose of this notice is to establish a ballot pool to participate in the consensus development process and ballot the proposed standards action. The ballot pool may be established early in the standards development process to encourage active participation in the development process.

Any member of the Registered Ballot Body may join or drop out of a ballot pool until the ballot period begins (Step 9). No Registered Ballot Body member may join or leave the ballot pool once the first ballot starts, including between the first ballot and a recirculation ballot. The standards process manager shall coordinate changes to the membership of the ballot pool and publicly post the standard ballot pool for each standard action.

### **First Ballot**

If a decision is made to submit the draft standard to a vote, the draft standard, all comments received, and the responses to those comments shall be posted electronically to the ballot pool and noticed at least 30- days prior to the start of the ballot.

The ballot will be conducted electronically. Each standard has its own ballot pool and all members of the ballot pool shall be eligible to vote on the associated standard. The time window for voting will be designated when the draft standard is posted to the ballot pool. In no case will the voting time window start sooner than 30-days from the notice of the posting to the ballot pool. Typically, the voting time window will be a period of ten days. This provides a total of 40-days from the initial notice until the end of the voting period.

Approval of a reliability standard or revision to a reliability standard requires both:

- A quorum, which is established by at least 75% of the members of the ballot pool submitting a response with an affirmative vote, a negative vote, or an abstention<sup>3</sup>; and
- A two-thirds majority of the weighted segment votes cast must be affirmative. The number of votes cast is the sum of affirmative and negative votes, excluding abstentions, and non-responses.

The following process is used to determine if there are sufficient affirmative votes. (See Appendix C, “Examples of Weighted Segment Voting Calculation.”):

- The number of affirmative votes cast in each segment will be divided by the sum of affirmative and negative votes cast to determine the fractional affirmative vote for each segment. Abstentions and non-responses will not be counted for the purposes of determining the fractional affirmative vote for a segment.
- If there are less than ten entities that vote in a segment, the vote weight of that segment shall be proportionally reduced. Each voter within that segment shall receive a weight of 10% of the segment vote. For segments with ten or more voters, the regular voting procedure would prevail.
- The sum of the fractional affirmative votes from all segments divided by the number of segments voting will be used to determine if a two-thirds majority has been achieved. (A segment will be considered as “voting” if any member of the segment in the ballot pool casts either an affirmative or a negative vote.)
- A standard will be approved if the sum of fractional affirmative votes from all segments divided by the number of voting segments is greater than two thirds.

Each member of the ballot pool may vote on one of the following positions:

- Affirmative
- Affirmative, with comment
- Negative, with or without reasons (the reasons for a negative vote may be given and if possible should include specific wording or actions that would resolve the objection)
- Abstain

Members of the ballot pool should submit any comments on the proposed standard during the public comment period. If any comments are received during the ballot period, they shall be addressed in accordance with Step 8 and included with the recirculation ballot. The standards process manager shall facilitate the standard drafting team, assisted by the requester, in preparing a response to all votes submitted with reasons. The member submitting a vote with reasons will determine if the response provided satisfies those reasons. In addition, each objector shall be informed that an appeals process exists within the NERC standards process. A negative vote that does not contain a statement of reason does not require a response.

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<sup>3</sup> If a quorum of the ballot pool is not established, the standard will be balloted a second time, allowing a 15business-day period for the ballot. Should a quorum not be established with the second ballot, the standards process manager would re-survey the Registered Ballot Body to establish interest in participating in a ballot on the standard in accordance with the procedures in this procedure. A re-ballot of the standard will take place with the revised standard ballot pool.

If there are no negative votes with reasons from the first ballot, then the results of the first ballot shall stand. If, however, one or more members submit negative votes with reasons, regardless whether those reasons are resolved or not, a second ballot shall be conducted.

Results of all ballots will be posted.

### **Second Ballot**

In the second ballot (also called a “recirculation ballot”), members of the ballot pool shall again be presented the proposed standard (unchanged from the first ballot) along with the reasons for negative votes, the responses, and any resolution of the differences. All members of the ballot pool shall be permitted to reconsider and change their vote from the first ballot. Members of the ballot pool that did not respond to the first ballot shall be permitted to vote in the second ballot. In the second ballot, votes will be counted by exception only — members on the second ballot may indicate a revision to their original vote, otherwise their vote shall remain the same as in the first ballot. If a second ballot is conducted, the results of the second ballot shall determine the status of the standard, regardless of the outcome of the first ballot.

The voting time window for the second ballot is once again ten days. The 30-day posting is not required for the second ballot. Members of the ballot pool may submit comments in the second ballot but no response is required.

In the second ballot step, no revisions to the standard are permitted, as such revisions would not have been subject to public comment. However, if the Standards Committee determines that revisions proposed during the ballot process would likely provide an opportunity to achieve consensus on the standard, then such revisions may be made and the draft standard posted for public comment again beginning with Step 6 and continuing with subsequent steps.

The standards process manager shall post the final outcome of the ballot process. If the standard is rejected, the process is ended and any further work in this area would require a new SAR. If the standard is approved, the consensus standard will be posted and presented to the Board of Trustees for adoption by NERC.

### **Step 10 — Adoption of the Reliability Standard by the Board**

***Objective:** To have the Board of Trustees adopt the standard as a NERC standard, and adopt the associated implementation plan.*

***Sequence Considerations:** The 30-day notice prior to action by the Board of Trustees may begin concurrently with or any time after the start of the first ballot. The 30-day period shall not end any sooner than the end of the final ballot.*

A reliability standard submitted for adoption by the Board of Trustees must be publicly posted and noticed at least 30-days prior to action by the Board of Trustees. At a regular or special meeting, the Board of Trustees shall consider adoption of the proposed reliability standard. The board shall consider the results of the balloting and dissenting opinions. The board shall consider any advice offered by the NERC Stakeholders Committee. The board shall adopt or reject a standard, but may not modify a proposed reliability standard. If the board chooses not to adopt a standard, it shall provide its reasons for not doing so.

A reliability standard that is adopted by the board shall become effective on a date designated by the board in accordance with the implementation plan. The standard will be publicly posted, showing the final status.

### **Step 11 — Implementation of Reliability Standard**

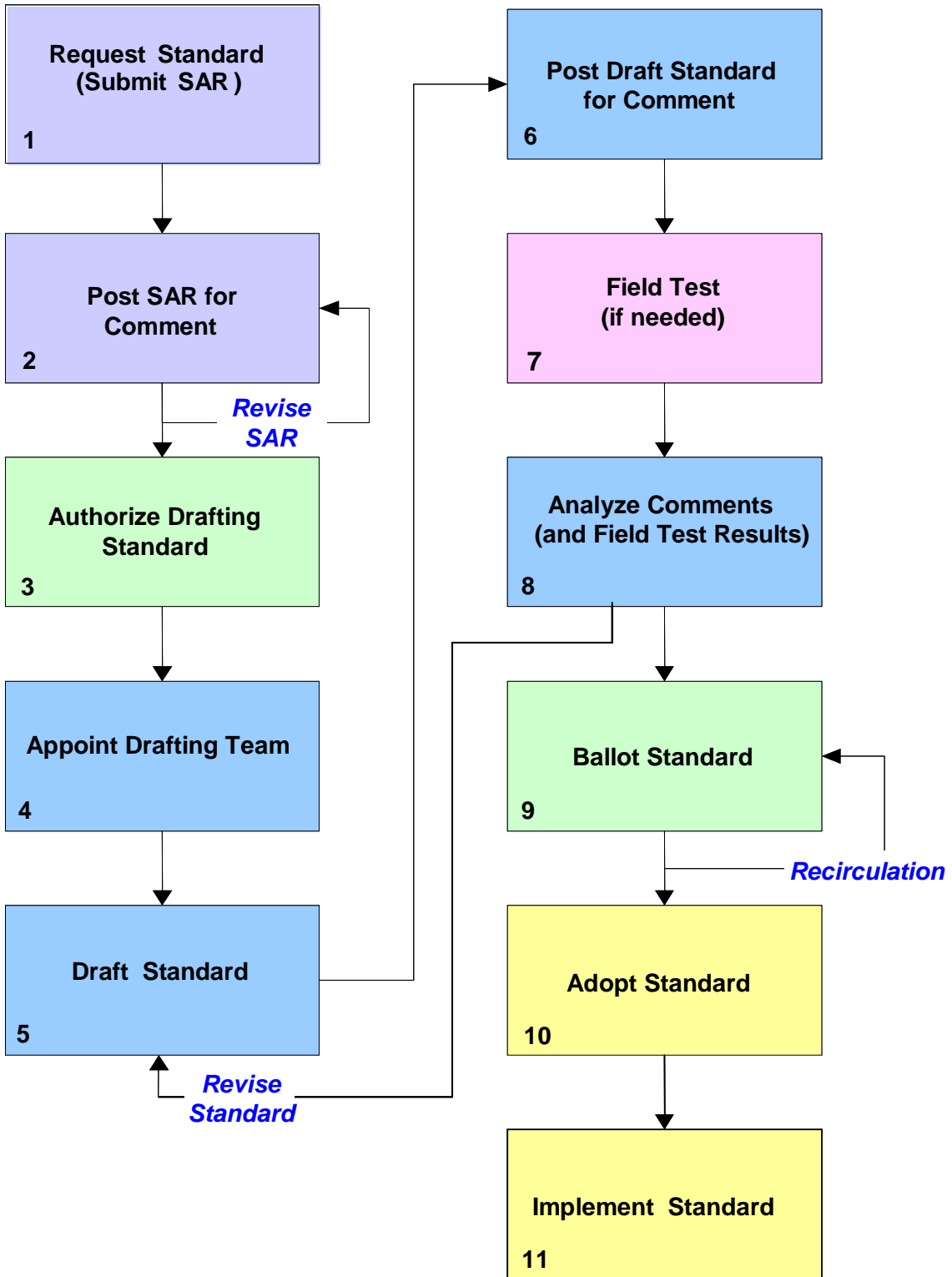
***Objective:** Industry stakeholders use the standard and the compliance program incorporates the standard into its compliance monitoring and enforcement.*

***Sequence Considerations:** The effective date of a standard is approved as part of the standard implementation plan and shall not be sooner than adoption by the board.*

Once a reliability standard is adopted and made effective in accordance with the implementation plan, all persons and organizations subject to the bylaws of NERC are required to comply with the standard in accordance with those bylaws and other applicable agreements. The Board of Trustees has established a separate compliance program to measure compliance with the standards and administer sanctions as appropriate. After adoption of a NERC reliability standard, the standard will be forwarded to the compliance program for compliance monitoring and enforcement.

Reliability standards may, at the discretion of the board, be filed with applicable regulatory agencies in the United States, Canada, and Mexico.

Figure 1: Process Diagram





## **Special Procedures**

### **Urgent Actions**

Under certain conditions, the Standards Committee may designate a proposed standard or revision to a standard as requiring urgent action. Urgent action may be appropriate when a delay in implementing a proposed standard or revision can materially impact reliability of the Bulk Electric Systems. The Standards Committee must use its judgment carefully to ensure an urgent action is truly necessary and not simply an expedient way to change or implement a standard.

A requester prepares a SAR and a draft of the proposed standard and submits it to the standards process manager. The SAR must include a justification for urgent action. The standards process manager submits the request to the Standards Committee for its consideration. If the Standards Committee designates the requested standard or revision as an urgent action item, then the standards process manager shall immediately seek participants for a ballot pool (as described in Step 3 of the process) and shall post the draft. This posting requires a minimum 30-day posting period before the ballot and applies the same voting procedure as described in Step 9.

Any standard approved as an urgent action shall have a termination date specified that shall not exceed one year from the approval date. Should there be a need to make the standard permanent, then the standard would be required to go through the full consensus process.

Urgent actions that expire may be renewed using the urgent action process again, in the event a permanent standard is not adopted. In determining whether to authorize an urgent action standard for a renewal ballot, the Standards Committee shall consider the impact of the standard on the reliability of the Bulk Electric System and whether expeditious progress is being made toward a permanent replacement standard. The Standards Committee shall not authorize a renewal ballot if there is insufficient progress toward adopting a permanent replacement standard or if the Standards Committee lacks confidence that a reasonable completion date is achievable. The intent is to ensure that an urgent action standard does not in effect take on a degree of permanence due to the lack of an expeditious effort to develop a permanent replacement standard. With these principles, there is no predetermined limit on the number of times an urgent action may be renewed. However, each urgent action standard renewal shall be effective only upon approval by a ballot pool and adoption by the board.

Any person or entity, including the drafting team working on a permanent replacement standard, may at any time submit a SAR proposing that an urgent action standard become a permanent standard by following the full standards process.

### **Interpretations of Standards**

All persons who are directly and materially affected by the reliability of the North American Bulk Electric Systems shall be permitted to request an interpretation of the standard. The person requesting an interpretation will send a request to the standards process manager explaining the specific circumstances surrounding the request and what clarifications are required as applied to those circumstances. The request should indicate the material impact to the requesting party or others caused by the lack of clarity or a possibly incorrect interpretation of the standard.

The standards process manager will assemble a team with the relevant expertise to address the clarification. The standards process manager shall also form a ballot pool.

As soon as practical (not more than 45-days), the team will draft a written interpretation to the standard addressing the issues raised. Balloting shall take place as described in Step 9 of this procedure. If approved, the interpretation is appended to the standard and is effective immediately. The interpretation will stand until such time as the standard is revised through the normal process, at which time the standard will be modified to incorporate the clarifications provided by the interpretation.

## **Regional Differences**

A regional difference is an aspect of a NERC reliability standard that applies only within a given region or regions. A regional difference may be used, for example, to exempt a particular region from all or a portion of a NERC reliability standard that does not apply in that region. A regional difference may establish different measures or performance criteria as necessary to achieve reliability within that region.

To the maximum extent feasible, regional differences should be addressed through the NERC standards process and incorporated into and approved as part of the NERC reliability standard. In all cases, if a requirement would otherwise be inconsistent with or less stringent than a NERC reliability standard, then that regional difference shall be made part of the NERC reliability standard.

Regional differences should be identified and considered when the SAR is posted for comment. Regional differences should also be considered in the drafting of a standard, with the intent to make any necessary regional differences a part of the standard. Public comments on the draft standard provide a second opportunity to ensure necessary regional differences have been accommodated in the draft. The public posting also allows for all impacted parties to identify the requirements of a NERC reliability standard as applied within all regions and Interconnections.

Regional differences that are proposed to be made part of a NERC reliability standard shall be considered during the NERC standards process in accordance with the criteria for regional standards and regional differences section below. These criteria provide that:

- Interconnection-wide regional differences are presumed to be valid, and there is a burden of proof to demonstrate otherwise in accordance with the stated criteria; and
- Regional differences that are not applied on an Interconnection-wide basis are not presumed to be valid but may be demonstrated by the proponent to be valid in accordance with the stated criteria.

## **Regional Standards**

Regions may develop, through their own processes, separate regional standards that go beyond, add detail to, or implement NERC reliability standards, or that cover matters not addressed in NERC reliability standards. Regional standards may be developed and exist separately from NERC reliability standards, or may be proposed as NERC reliability standards. Regional standards that exist separately from NERC reliability standards shall not be inconsistent with or less stringent than NERC reliability standards.

A regional standard that is proposed to be made a NERC reliability standard shall be considered during the NERC standards process in accordance with the criteria for regional standards and regional differences section below. These criteria provide that:

- Interconnection-wide regional standards are presumed to be valid, and there is a burden of proof to demonstrate otherwise in accordance with the stated criteria; and
- Regional standards that are not applied on an Interconnection-wide basis are not presumed to be valid but may be demonstrated by the proponent to be valid in accordance with the stated criteria.

### **Criteria for Regional Standards and Regional Differences**

Proposals for regional standards or regional differences that are intended to apply on an Interconnection-wide basis shall be presumed to be valid and included in a NERC reliability standard unless there is a clear demonstration within the NERC standards process that the proposed regional standard or regional difference:

- Was not developed in a fair and open process that provided an opportunity for all interested parties to participate;
- Would have a significant adverse impact on reliability or commerce in other Interconnections;
- Fails to provide a level of reliability of the Bulk Electric System within the interconnection such that the regional standard would be likely to cause a serious and substantial threat to public health, safety, welfare, or national security; or
- Would create a serious and substantial burden on competitive markets within the interconnection that is not necessary for reliability.

Proposals for regional standards or regional differences that are intended to apply only to part of an Interconnection will be included in a NERC reliability standard only if the proponent demonstrates that the proposed regional standard or regional difference:

- Was developed in a fair and open process that provided an opportunity for all interested parties to participate;
- Would not have an adverse impact on commerce that is not necessary for reliability;
- Provides a level of Bulk Electric System reliability that is adequate to protect public health, safety, welfare, and national security and would not have a significant adverse impact on reliability; and
- Is based on a justifiable difference between regions or between subregions within the regional organization's geographic area.

### **Appeals**

Persons who have directly and materially affected interests and who have been or will be adversely affected by any substantive or procedural action or inaction related to the development, approval, revision, reaffirmation, or withdrawal of a reliability standard shall have the right to appeal. This appeals process applies only to the NERC reliability standards process as defined in this procedure.

The burden of proof to show adverse effect shall be on the appellant. Appeals shall be made within 30-days of the date of the action purported to cause the adverse effect, except appeals for inaction, which may be made at any time. In all cases, the request for appeal must be made prior to the next step in the process.

The final decisions of any appeal shall be documented in writing and made public.

The appeals process provides two levels, with the goal of expeditiously resolving the issue to the satisfaction of the participants:

### ***Level 1 Appeal***

Level 1 is the required first step in the appeals process. The appellant submits a complaint in writing to the standards process manager that describes the substantive or procedural action or inaction associated with a reliability standard or the standards process. The appellant describes in the complaint the actual or potential adverse impact to the appellant. Assisted by any necessary staff and committee resources, the standards process manager shall prepare a written response addressed to the appellant as soon as practical but not more than 45-days after receipt of the complaint. If the appellant accepts the response as a satisfactory resolution of the issue, both the complaint and response will be made a part of the public record associated with the standard.

### ***Level 2 Appeal***

If after the Level 1 Appeal the appellant remains unsatisfied with the resolution, as indicated by the appellant in writing to the standards process manager, the standards process manager shall convene a Level 2 Appeals Panel. This panel shall consist of five members total appointed by the Board of Trustees. In all cases, Level 2 Appeals Panel members shall have no direct affiliation with the participants in the appeal.

The standards process manager shall post the complaint and other relevant materials and provide at least 30-days notice of the meeting of the Level 2 Appeals Panel. In addition to the appellant, any person that is directly and materially affected by the substantive or procedural action or inaction referenced in the complaint shall be heard by the panel. The panel shall not consider any expansion of the scope of the appeal that was not presented in the Level 1 Appeal. The panel may in its decision find for the appellant and remand the issue to the Standards Committee with a statement of the issues and facts in regard to which fair and equitable action was not taken. The panel may find against the appellant with a specific statement of the facts that demonstrate fair and equitable treatment of the appellant and the appellant's objections. The panel may not, however, revise, approve, disapprove, or adopt a reliability standard, as these responsibilities remain with the standard's ballot pool and Board of Trustees, respectively. The actions of the Level 2 Appeals Panel shall be publicly posted.

In addition to the foregoing, a procedural objection that has not been resolved may be submitted to the Board of Trustees for consideration at the time the board decides whether to adopt a particular reliability standard. The objection must be in writing, signed by an officer of the objecting entity, and contain a concise statement of the relief requested and a clear demonstration of the facts that justify that relief. The objection must be filed no later than 30-days after the announcement of the vote by the ballot pool on the reliability standard in question.

## **Maintenance of Reliability Standards and Process**

### **Parliamentary Procedures**

Except as required by this procedure or other NERC documents, all meetings conducted as part of the standards process shall be guided by the latest version of Robert's Rules of Order.

### **Process Revisions**

#### ***Requests to Revise the Reliability Standards Development Procedure***

Any person or entity, including the Standards Committee, may submit a written request to modify the Reliability Standards Development Procedure. The Standards Committee shall oversee the handling of the request. The Standards Committee shall prioritize all requests, merge related requests, and respond to each requestor within 90-days. The Standards Committee shall classify each request into one of two types: 1) a procedural/administrative revision, or 2) a change affecting one or more "fundamental tenets" (described later).

#### ***Abbreviated Process for Procedural/Administrative Changes***

The Standards Committee shall handle all procedural/administrative requests using an abbreviated process described here. The Standards Committee shall post all proposed procedural/administrative revisions to the Reliability Standards Development Procedure for a 30-day public comment period. The Standards Committee shall consider all comments received and modify the proposed revisions as needed. Based on the degree of consensus for the revisions, the Standards Committee may:

- a. Submit the revised procedure directly to the board for adoption;
- b. Submit the revised procedure for ballot pool approval prior to submitting it for board adoption (the regular voting process in the procedure, including a recirculation ballot if needed, would be used and the results of the ballot would be binding on the decision to move the revisions to the board or not);
- c. Propose additional changes and repeat the posting for additional comments;
- d. Remand the proposal to the requester for further work; or
- e. Reject the proposal.
- f. The Standards Committee shall post any proposed revisions submitted for board adoption for a period of 30-days prior to board action. The Standards Committee shall submit to the board a description of the basis for the procedure changes, a summary of the comments received, and any minority views expressed in the comment process. The proposed procedure revisions will be effective upon board adoption, or another date designated by the board.

### ***Fundamental Tenets***

Certain provisions of the Reliability Standards Development Procedure are considered fundamental tenets and shall be handled using the full approval process described below. These fundamental tenets shall be modifiable only by approval of the Registered Ballot Body as indicated by vote of a ballot pool. These fundamental tenets include the following:

- Purpose (page 1)
- Authority (page 1)
- Definition of a reliability standard (page 3)
- Characteristics of a reliability standard (page 3)
- Elements of a reliability standard (page 3)
- Registered ballot body (page 7)
- Ballot pool (page 7)
- Subcommittees, working groups, and task forces (page 8)
- Definitions of due process, openness, and balance (page 10)
- Step 9 – Ballot the new or revised standard (pages 18–20)
- Step 10 – Adoption of the reliability standard by the board (page 20)
- Urgent actions (page 23)
- Regional differences (page 24)
- Regional standards (page 24)
- Criteria for regional differences (page 25)
- Appeals process (pages 29–30)
- Process revisions (page 27)
- Registration procedures (page 36)
- Segment qualification guidelines (pages 36–38)
- Stakeholder segments (page 39–40)

### ***Process for Changing Fundamental Tenets***

When proceeding with a proposed revision to the Reliability Standards Development Procedure affecting one or more fundamental tenets, the Standards Committee shall use a full approval process. The Standards Committee shall post the proposed revisions for a 45-day public comment period. Based on the degree of consensus for the revisions, the Standards Committee may:

- a. Submit the revised procedure for ballot pool approval;
- b. Repeat the posting for additional inputs after making changes based on comments received;
- c. Remand the proposal to the requester for further work; or
- d. Reject the proposal.

The Registered Ballot Body shall be represented by a ballot pool formed when the proposed revisions are first posted for comment. The ballot procedure shall be the same as that defined for approval of a standard, including the use of a recirculation ballot if needed. If the proposed revision is approved by the ballot pool, the Standards Committee shall submit the revised procedure to the board for adoption. The Standards Committee shall post any proposed revisions submitted for board adoption for a period of 30-days prior to board action. The Standards Committee shall submit to the board a description of the basis for the procedure changes, a summary of the comments received, and any minority views expressed in the comment and ballot process. The proposed procedure revisions will be effective upon board adoption, or another date designated by the board.

The Board of Trustees endorsed the industry segments and weighted segment voting model described in Appendix B of the Reliability Standards Development Procedure and reserves the right to change the segments and the weighted segment voting model from time to time at its discretion. This does not preclude others from requesting a change to the segments or weighted segment voting model through the process described here.

### **Appeals**

Persons who have directly or materially affected interests and who have been or will be adversely affected by any substantive or procedural action or inaction related to revision of the Reliability Standards Development Procedure shall have the right to appeal, using the process described under appeals.

### **Filing of Revisions with ANSI**

The NERC staff shall submit revisions to the Reliability Standards Development Procedure to ANSI as needed to maintain NERC's status as an ANSI-accredited standards developer.

### **Standards Process Accreditation**

NERC shall seek continuing ANSI accreditation of the standards process defined by this procedure. The standards process manager shall be responsible for administering the accreditation application and maintenance process.

### **Five-Year Review**

Each reliability standard shall be reviewed at least once every five years from the effective date of the standard or the latest revision to the standard, whichever is later. The review process shall be conducted in accordance with Steps 6, 8, and 9 of the standards process. As a result of this review, a reliability standard shall be reaffirmed, revised, or withdrawn. If this review indicates a need to revise or delete the standard, a SAR shall be prepared and submitted in accordance with the standards process. The standard process manager shall be responsible for administration of the five-year review of reliability standards.

### **Filing of Reliability Standards with Regulatory Agencies**

At the discretion of the Board of Trustees, adopted reliability standards may be filed with applicable regulatory agencies in the United States, Canada, and Mexico.

### **Online Standards Information System**

The standards process manager shall be responsible for maintaining an electronic database of information regarding currently proposed and currently in effect reliability standards. This information shall include

current standards in effect, proposed revisions to standards, and proposed new standards. This information shall provide a record, at a minimum for the previous five years, of the review and approval process for each reliability standard, including public comments received during the development and approval process. This information shall be available through public Internet access.

### **Archived Standards Information**

The standards process manager shall be responsible for maintaining a historical record of reliability standards information that is no longer maintained online. For example, standards that expired or were replaced may be removed from the online system. Also, SARs that are no longer being considered in the standards process may be placed in the archived records. Archived information shall be retained indefinitely as practical, but in no case less than five years or one complete standard cycle from the date on which the standard was no longer in effect. Archived records of standards information shall be available electronically within 30-days following the receipt by the standards process manager of a written request.

### **Numbering System**

The standards process manager shall establish and maintain a system of identification numbers that allow reliability standards to be categorized and easily referenced.



## Supporting Documents

The following documents may be developed to support a reliability standard. These documents may explain or facilitate implementation of standards but do not themselves contain mandatory requirements subject to compliance review. Any requirements that are mandatory shall be incorporated into the standard. For example, a procedure that must be followed as written must be incorporated into a reliability standard. If the procedure defines one way, but not necessarily the only way, to implement a standard it is more appropriately a reference.

Type of Document	Description	Approval
Standard Reference	Descriptive, explanatory information to support the understanding and interpretation of a reliability standard.	Standing Committee
Standard Supplement	Data forms, pro forma documents, and associated instructions that support the implementation of a reliability standard.	Standing Committee
Procedure	Step-wise instructions defining a particular process or operation. Procedures may support the implementation of a reliability standard or satisfy another purpose consistent with the reliability and market interface principles.	Standing Committee
Practice	A convention of behavior. Practices may support the implementation of a reliability standard or satisfy another purpose consistent with the reliability and market interface principles.	Standing Committee
Training Reference	Training materials that may support the implementation of a reliability standard or satisfy another purpose consistent with the reliability and market interface principles.	Standing Committee
Technical Reference	Descriptive, technical information or analysis. A technical reference may support the implementation of a reliability standard or satisfy another purpose consistent with the reliability and market interface principles.	Standing Committee
White Paper	An informal paper stating a position or concept. A white paper may be used to propose preliminary concepts for a standard or one of the documents above.	Standing Committee approves for publication with no implied approval of the concepts or positions in the white paper.

## Appendix A – Information in a Standard Authorization Request

The table below provides a representative example<sup>4</sup> of information in a Standard Authorization Request. The standards process manager shall be responsible for implementing and maintaining this form as needed to support the information requirements of the standards process. Standard Authorization Request Form

Title of Proposed Standard:
Request Date:

### **SAR Requestor Information**

<b>Name:</b>	<b>SAR Type (Check box for one of these selections.)</b>	
Company:	<input type="checkbox"/>	New Standard
Telephone:	<input type="checkbox"/>	Revision to Existing Standard
Fax:	<input type="checkbox"/>	Withdrawal of Existing Standard
E-mail:	<input type="checkbox"/>	Urgent Action

***Purpose (Describe the purpose of the proposed standard — what the standard will achieve in support of reliability.)***

***Industry Need (Provide a detailed statement justifying the need for the proposed standard, along with any supporting documentation.)***

<sup>4</sup> The latest version of this form can be downloaded from the NERC standards development Web page:

<http://www.nerc.com/~filez/sar.html>

**Brief Description (Describe the proposed standard in sufficient detail to clearly define the scope in a manner that can be easily understood by others.)**

## Reliability Functions

<b>The Standard will Apply to the Following Functions (Check box for each one that applies.)</b>		
<input type="checkbox"/>	Reliability Authority	Ensures the reliability of the bulk transmission system within its reliability authority area. This is the highest reliability authority.
<input type="checkbox"/>	Balancing Authority	Integrates resource plans ahead of time, and maintains load-interchange-resource balance within its metered boundary and supports system frequency in real time
<input type="checkbox"/>	Interchange Authority	Authorizes valid and balanced Interchange Schedules
<input type="checkbox"/>	Planning Authority	Plans the bulk electric system
<input type="checkbox"/>	Transmission Service Provider	Provides transmission services to qualified market participants under applicable transmission service agreements
<input type="checkbox"/>	Transmission Owner	Owns transmission facilities
<input type="checkbox"/>	Transmission Operator	Operates and maintains the transmission facilities, and executes switching orders
<input type="checkbox"/>	Distribution Provider	Provides and operates the "wires" between the transmission system and the customer
<input type="checkbox"/>	Generator	Owns and operates generation unit(s) or runs a market for generation products that performs the functions of supplying energy and interconnected operations services
<input type="checkbox"/>	Purchasing-Selling Entity	The function of purchasing or selling energy, capacity and all necessary interconnected operations services as required
<input type="checkbox"/>	Load-Serving Entity	Secures energy and transmission (and related generation services) to serve the end user

## Reliability and Market Interface Principles

<b>Applicable Reliability Principles (Check box for all that apply.)</b>	
<input type="checkbox"/>	1. Interconnected bulk electric systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.
<input type="checkbox"/>	2. The frequency and voltage of interconnected bulk electric systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
<input type="checkbox"/>	3. Information necessary for the planning and operation of interconnected bulk electric systems shall be made available to those entities responsible for planning and operating the systems reliably.
<input type="checkbox"/>	4. Plans for emergency operation and system restoration of interconnected bulk electric systems shall be developed, coordinated, maintained, and implemented.

<input type="checkbox"/>	5. Facilities for communication, monitoring, and control shall be provided, used, and maintained for the reliability of interconnected bulk electric systems.
<input type="checkbox"/>	6. Personnel responsible for planning and operating interconnected bulk electric systems shall be trained, qualified, and have the responsibility and authority to implement actions.
<input type="checkbox"/>	7. The security of the interconnected bulk electric systems shall be assessed, monitored, and maintained on a wide-area basis.

**Does the proposed Standard comply with all of the following Market Interface Principles? (Select 'yes' or 'no' from the drop-down box.)**

Recognizing that reliability is an essential requirement of a robust North American economy:

1. A reliability standard shall not give any market participant an unfair competitive advantage. Yes
2. A reliability standard shall neither mandate nor prohibit any specific market structure. Yes
3. A reliability standard shall not preclude market solutions to achieving compliance with that standard. Yes
4. A reliability standard shall not require the public disclosure of commercially sensitive information. All market participants shall have equal opportunity to access commercially non-sensitive information that is required for compliance with reliability standards. Yes

**Detailed Description (Provide enough detail so that an independent entity familiar with the industry could draft a standard based on this description.)**

**Related Standards**

<b>Standard No.</b>	<b>Explanation</b>

**Related SARs**

<b>SAR ID</b>	<b>Explanation</b>

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**Regional Differences**

<b><i>Region</i></b>	<b><i>Explanation</i></b>
ERCOT	
FRCC	
MRO	
NPCC	
RFC	
SERC	
SPP	
WECC	

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## Appendix B – Development of the Registered Ballot Body<sup>5</sup>

### Registration Procedures

The Registered Ballot Body comprises all organizations and entities that:

1. Qualify for one of the segments, and
2. Are registered with NERC as potential ballot participants in the voting on standards, and
3. Are current with any designated fees.

Each participant, when initially registering to join the Registered Ballot Body, and annually thereafter, will self-select to belong to one of the segments described above.

The NERC general counsel will review all applications for joining the Registered Ballot Body, and make a determination of whether the self-selection satisfies at least one of the guidelines to belong to that segment. The entity will then be “credentialed” to participate as a voting member of that segment. The Standards Committee will decide disputes, with an appeal to the Board of Trustees.

All registrations will be done electronically.

### Segment Qualification Guidelines

The segment qualification guidelines are inclusive; i.e., any entity with a legitimate interest in the electric industry that can meet any one of the guidelines for a segment is entitled to belong to and vote in that segment.

The general guidelines for all segments are:

1. Corporations or organizations with integrated operations or with affiliates that qualify to belong to more than one segment (e.g., Transmission Owners and Load-Serving Entities) may belong to each of the segments in which they qualify, provided that each segment constitutes a separate membership and is represented by a different representative.
2. Corporations, organizations, and entities may participate freely in all subgroups.
3. After their initial selection, registered participants may apply to change segments annually, according to a defined schedule.
4. The qualification guidelines and rules for joining segments will be reviewed periodically to ensure that the process continues to be fair, open, balanced, and inclusive. Public input will be solicited in the review of these guidelines.
5. Since all balloting of standards will be done electronically, any registered participant may designate an agent or proxy to vote on its behalf. There are no limits on how many proxies an agent may hold.

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<sup>5</sup> This description is from the final report of the NERC Standing Committees Representation Task Force, February 7, 2002. The Board of Trustees endorsed the industry segments and weighted segment voting model described within this document on February 20, 2002 and may change this from time to time. The latest version (approved or endorsed by the NERC Board of Trustees) shall be used in the NERC Standards Development Process.

However, NERC must have in its possession, either in writing or by e-mail, documentation that the voting right by proxy has been transferred from the registered participant to the agent.

## **Initial Segments**

### **Segment 1. Transmission Owners**

- a. Any entity that owns or controls at least 200 circuit miles of integrated transmission facilities, or has an Open Access Transmission Tariff or equivalent on file with a regulatory authority.
- b. Transmission owners that have placed their transmission under the operational control of an RTO.
- c. Independent transmission companies or organizations, merchant transmission developers, and transcos that are not RTOs.
- d. Excludes RTOs and ISOs (that are eligible to belong to Segment 2).

### **Segment 2. Regional Transmission Organizations (RTOs), Independent System Operators (ISOs), and Regional Reliability Organizations (RROs)**

- a. Authorized by appropriate regulator to operate as an RTO or ISO.
- b. Regional reliability organizations.
- c. In cases where the RTO or ISO and the RRO have exactly the same geographic boundary, both may belong to this segment as long as they are separate entities.

### **Segment 3. Load-Serving Entities (LSEs)**

- a. Entities serving end-use customers under a regulated tariff, a contract governed by a regulatory tariff, or other legal obligation to serve.
- b. A member of a generation and transmission (G&T) cooperative or a joint-action agency is permitted to designate the G&T or joint-action agency to represent it in this segment; such designation does not preclude the G&T or joint-action agency from participation and voting in another segment representing its direct interests.

### **Segment 4. Transmission Dependent Utilities (TDUs)**

- a. Entities with a regulatory, contract, or other legal obligation to serve wholesale aggregators or end-use customers, and that depend primarily on the transmission systems of third parties to provide this service.
- b. Agents or associations can represent groups of TDUs.

### **Segment 5. Electric Generators**

- a. Affiliated and independent generators.

- b. A corporation that sets up separate corporate entities for each one or two generating plants in which it is involved may only have one vote in this segment regardless of how many single-plant or two-plant corporations the parent corporation has established or is involved in.

**Segment 6. Electricity Brokers, Aggregators, and Marketers**

- a. Entities serving end-use customers under a power marketing agreement or other authorization not classified as a regulated tariff.
- b. An entity that buys, sells, or brokers energy and related services for resale in wholesale or retail markets, whether a non-jurisdictional entity operating within its charter or an entity licensed by a jurisdictional regulator.
- c. G&T cooperatives and joint-action agencies that perform an electricity broker, aggregator, or marketer function are permitted to belong to this segment.

**Segment 7. Large Electricity End Users**

- a. At least one service delivery taken at 50 kV (radial supply or facilities dedicated to serve customers) that is not purchased for resale.
- b. A single 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.
- c. Agents or associations can represent groups of large end users.

**Segment 8. Small Electricity Users**

- a. Service taken at below 50 kV.
- b. A single customer 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.
- c. Agents, state consumer advocates, or other advocate groups can represent groups of small customers.
- d. Any entity or person who has a financial relationship with an entity that is eligible to join one of the other eight segments shall not be qualified to join Segment 8. A financial relationship with such an entity shall mean current employment or a contract involving compensation to provide products or services within the prior 12 months. Such a person or entity may join one and only one of the segments for which the entities it provides products and services to is qualified to join.

**Segment 9. Federal, State, and Provincial Regulatory or other Government Entities**

- a. Does not include federal power management agencies or the Tennessee Valley Authority.
- b. May include public utility commissions.



## Appendix C – Examples of Weighted Segment Voting Calculation

(Assumptions on numbers of entities are purely hypothetical and used only for illustrative purposes.)

### Ballot Body and Pools

Segment	Registered Ballot Body	Ballot Pools	
		Standard #1	Standard #2
1. Transmission Owners	300	250	100
2. RTOs, ISOs, and RROs	20	20	20
3. LSEs	200	100	50
4. TDUs	100	75	50
5. Electric Generators	25	20	25
6. Brokers, Aggregators, and Marketers	10	10	10
7. Large End-Use Customers	5	1	4
8. Small End-Use Customers	25	10	5
9. Regulators or Other Government Entities	50	10	15
<b>Totals</b>	<b>735</b>	<b>496</b>	<b>279</b>

### Example 1

Segment	Ballot Pool	Votes				Abstain	No Ballot
		Affirmative		Negative			
		# Votes	Fraction	# Votes	Fraction		
1	250	200	0.833	40	0.167	10	0
2	20	15	0.750	5	0.250	0	0
3	100	60	0.632	35	0.368	5	0
4	75	50	0.714	20	0.286	0	5
5	20	7	0.412	10	0.588	2	1
6	10	6	0.600	4	0.400	0	0
7	1	0		0		1	0
8	10	0		0		0	10
9	10	8	0.800	2	0.200	0	0
<b>Totals</b>	<b>496</b>	<b>346</b>	<b>4.741</b>	<b>116</b>	<b>2.259</b>	<b>18</b>	<b>16</b>
<b>Ballots</b>	<b>480</b>	<b>96.8%</b>					
<b>Wtd Vote</b>			<b>0.677</b>		<b>0.323</b>		

Weighted segment vote is greater than two thirds AND more than 75% of the standard ballot pool returned a ballot. Standard is approved.

No "Affirmative" or "Negative" votes cast, so segments not counted in total weighting.

Percent ballots returned  
 $= (480/496) \times 100$   
 $= 96.6\%$

Weighted segment vote  
 $= (\text{Total Fraction}) / (\text{Segments Counted})$   
 $= 4.741 / 7$

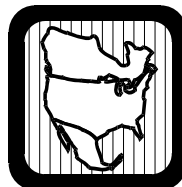
## Example 2

Segment	Ballot Pool	Votes				Abstain	No Ballot
		Affirmative		Negative			
		# Votes	Fraction	# Votes	Fraction	# Votes	
1	100	25	1.000	0	0.000	0	75
2	20	15	0.750	5	0.250	0	0
3	50	30	0.600	20	0.400	0	0
4	50	25	0.833	5	0.167	0	20
5	25	18	0.783	5	0.217	2	0
6	10	6	0.600	4	0.400	0	0
7	4	4	1.000	0	0.000	0	0
8	5	5	1.000	0	0.000	0	0
9	15	7	1.000	0	0.000	5	3
<b>Total</b>	<b>279</b>	<b>135</b>	<b>7.566</b>	<b>39</b>	<b>1.434</b>	<b>7</b>	<b>98</b>
<b>Ballots</b>	<b>181</b>	<b>64.87%</b>					
<b>Wtd Vote</b>			<b>0.841</b>		<b>0.159</b>		

Weighted segment vote is greater than two thirds BUT less than 75% of the standard ballot pool returned a ballot. Standard is NOT approved.

CHI\4513835.1

# **Election of Members of the NERC Standards Committee Procedure**



November 1, 2005

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## **Purpose**

This procedure is provided for use by the NERC Standards Registered Ballot Body to facilitate the election of industry stakeholder segment (Segment)<sup>1</sup> representatives to the NERC Standards Committee. This procedure is a default process that is available, on a voluntary basis, for the benefit of all Segments of the Registered Ballot Body. The use of alternative procedures is described in a later section.

## **Responsibilities for This Procedure**

The NERC Board of Trustees provides oversight of the election of Standards Committee members. The Board provides the authority for approval of this procedure and any revisions thereto, and monitors any Segment-specific procedures that may be developed to ensure they are consistent with established principles.

The Standards Committee shall be responsible for advising the Board regarding the use of this procedure or any revisions to the procedure.

Each Registered Ballot Body entity shall be responsible for actively participating in the nomination and election of Standards Committee representatives for each Segment in which the entity is a member.

The Standards Process Manager (SPM) shall administer the implementation and maintenance of this procedure.

## **Guiding Principles**

This procedure supports a standards development process that is open, inclusive, balanced, and fair. This procedure shall be interpreted in a manner that is consistent with NERC's mission of promoting the reliability of the North American bulk electric systems, NERC Reliability Standards Development Procedure, NERC's Reliability and Market Interface Principles, and maintaining good standing as a standards developer accredited by the American National Standards Institute.

## **Standards Committee Membership**

Each valid<sup>2</sup> Segment shall be eligible to elect two voting members to represent the Segment on the Standards Committee. A registered entity may provide only one Standards Committee member, irrespective of the number of segments in which the entity is registered. Each representative that is elected by a Segment to fill one of those positions shall serve on behalf of the Registered Ballot Body entities in that Segment. An eligible position on the committee that is not filled by a Segment shall be shown as vacant and shall not be counted in the determination of a quorum. Each elected member of the Standards Committee shall carry one vote.

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<sup>1</sup> Industry stakeholder Segment criteria and a list of entities in the NERC Standards Registered Ballot Body are provided at <https://www.nerc.net/standards/ballotbody/>. In this procedure, the term "Segment" shall mean one of the currently defined industry stakeholder Segments.

<sup>2</sup> Validity is determined by established Segment criteria, including the minimum number of entities in a Segment.

## **Standards Committee Membership Term**

The Standards Committee reports to the NERC Board of Trustees and is responsible for managing the NERC Reliability Standards Development Procedure and other duties as assigned by the Board.

The Standards Committee also serves for the benefit of the members of the Registered Ballot Body and is accountable to them through election by the Segment representatives. Standards Committee membership shall be for a term of two years, with members' terms staggered such that half of the member positions (one per Segment) are refilled each year by Segment election. Prior to the end of each term, nominations will be received and an election held in accordance with this procedure, or a qualified Segment procedure, to elect Standards Committee representatives for the next term. There is no limit on the number of two-year terms that a member of the Standards Committee may serve, although the setting of limits in the future is not precluded.

## **Standards Committee Officers**

At the beginning of each annual term, the Standards Committee shall as a first order of business elect a chairman and vice chairman to serve as officers and preside over the business of the committee. The officers shall serve a term of one year, without limit on the number of terms an officer may serve, although the setting of limits in the future is not precluded. The SPM serves as a non-voting member and secretary of the Standards Committee.

## **Standards Committee Scope and Conduct of Business**

The Standards Committee conducts its business in accordance with a separate scope document, the Reliability Standards Development Procedure, other applicable NERC procedures, and procedures that the committee itself may develop. This procedure addresses the nomination and election of members of the committee and is not intended to otherwise establish or limit the scope, authorities, or procedures of the committee.

## **Segment Representative Nominations**

Approximately 90 days prior to the start of each term, the SPM shall request nominations to fill Standards Committee positions that will become open with the expiration of the current term.

Notice of the nominations process shall be announced to the Registered Ballot Body and to others that may be interested in standards for the reliability of North American bulk electric systems. The SPM shall post the announcement on the NERC web page and distribute the announcement to applicable NERC e-mail lists. The announcement shall include a brief description of the responsibilities of the Standards Committee and estimates of the work effort and travel expected of Standards Committee members.

Any person or entity may submit a nomination. Self-nominations are encouraged.

To be eligible for nomination, a nominee shall be an employee or agent of an entity registered in the applicable Segment. To allow verification of affiliation, a nominee shall be a registered User in the NERC Registered Ballot Body. It is not required that the nominee be the same person as the entity's Registered Ballot Body representative for that Segment.

The SPM shall provide a method for the submittal of nominations, preferably an on-line nominations form using Internet protocols. The nomination form shall request the following information and other information that the SPM deems necessary to completing the election process:

***Nomination Information***

1. Segment for which the nomination is made.
2. Nominee name (selected from list of registrants).
3. Nominee job title.<sup>3</sup>
4. Nominee organization (must be an entity registered in the designated Segment).<sup>3</sup>
5. Nominee contact information: telephone, fax, e-mail, and mailing address.<sup>3</sup>
6. Nominee brief summary of qualifications related to serving on the Standards Committee (limited to a 3,000-character text box — approximately 500 words or one-page, single-spaced).
7. Indication (check box) that the nominee has been contacted and is willing to serve on the Standards Committee for a two-year term.
8. Person or entity making the nomination.
9. Contact information for person or entity making nomination: contact name, organization, telephone, fax, e-mail, and mailing address.

The SPM shall verify that each nomination received is complete and valid. The SPM may follow up with nominees to collect additional information.

In the event that multiple nominations are received for persons from a single entity within a Segment, that entity's representative shall determine which person will be the nominee from that entity.

The SPM shall post each nomination that is complete and valid. Each nomination shall be posted as soon as practical after it has been verified.

The nomination period shall remain open for 21 calendar days from the announced opening of the nominations, at which time the nominations shall be closed.

**Segment Representative Elections**

The SPM shall prepare a slate of nominees for each Segment. The Segment slate shall consist of all valid nominations received for that Segment, without prejudice in the method of listing the slate.

The SPM shall provide an electronic ballot form for each Segment, listing the slate of nominees. Each Registered Ballot Body entity in a Segment may cast one vote per Standards Committee member position being filled (i.e. one vote if one position is being filled and two votes if two positions are being filled). In the case that an entity casts two votes within a Segment, each vote

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<sup>3</sup> Information items 3–5 are provided automatically from the nominee during registration.

must be for a different candidate in that Segment (i.e. an entity cannot vote twice for a nominee within a Segment).

This ballot procedure is repeated for each Segment in which an entity is a member of the Registered Ballot Body. The ballot for each Segment is conducted independently from the ballots of other Segments. Only the entities in the Registered Ballot Body for a Segment may vote in that Segment.

The ballot period shall be announced to the Registered Ballot Body and to others that may be interested in standards for the reliability of North American bulk electric systems. The SPM shall post the announcement on the NERC web page and distribute the announcement to applicable NERC e-mail lists.

The ballot period shall remain open for ten calendar days from the announced opening of the ballot period, at which time the ballot period shall be closed.

Votes may be cast by the Registered Ballot Body Representative for each entity, or a proxy designated by the representative. An entity may vote in each Segment in which it is registered.

Ballot results shall remain confidential during the ballot period. As soon as practical after the close of the ballot period, the SPM shall publicly post the election results for each Segment, (i.e. the names of elected members and slates for any run-off elections that may be required).

## **Election Formula**

The elected Standards Committee member for each Segment shall be the nominee receiving the highest total number of votes, with the condition that the nominee must receive a vote from a simple majority of the entities casting a vote in that Segment. If the election is being held for two positions in a Segment, the nominees receiving the highest and second highest number of votes shall be elected, with the condition that each nominee must receive a vote from a simple majority of the entities casting a vote in that Segment<sup>4</sup>. In this case, if only one of the two nominees meets these criteria, then that nominee shall be deemed elected.

In the event that the election is incomplete in a Segment's first ballot (no candidate or only one candidate meets the criteria), then a second ballot will be conducted in that Segment, using a process similar to that previously described. If two positions are remaining to be filled in the second ballot, the slate of candidates shall consist of the four candidates receiving the highest number of votes in the first ballot. If one position is remaining to be filled in the second ballot, the slate shall consist of the two candidates receiving the highest number of votes. A candidate who was elected in the first ballot is considered elected and is excluded from the second ballot. In the event of a tie that precludes choosing the top four (or two) candidates, the slate will be expanded to include those candidates that are tied.

After the second ballot in the Segment, the candidate(s) receiving the highest number of votes shall be elected to fill the remaining position(s) in that Segment.

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<sup>4</sup> Each entity in the Segment is allowed to cast two votes. This criterion means that more than fifty percent (>50%) of the entities cast one of their votes for that nominee.



In the event of a tie between two or more candidates after a second ballot, a run-off ballot may be used to break the tie. The position shall remain vacant until the tie is broken by the Segment.

## **Representation from Canada**

To achieve balance of representation between the United States and Canada on the basis of net energy for load (NEL), the following special procedure shall apply:

1. If any regular election of Standards Committee members does not result in at least two Canadian members being elected, the Canadian nominees receiving the next highest percentage of votes within their respective Segment(s) will be designated as members, as needed to achieve a total of two Canadian members;
2. Each such specially designated Canadian member of the Standards Committee shall have a one year term, as the Standards Committee holds elections each year and special designation of members should not interfere with the regular election process;
3. If any segment, as defined in Appendix B of the Reliability Standards Development Procedure, has an unfilled position following the annual Standards Committee election, the first preference is to assign each specially designated Canadian representative to an unfilled segment for which he or she qualifies;
4. Any such specially designated members of the Standards Committee shall have the same rights and obligations as all other members of the Standards Committee;
5. For the purpose of the Standards Committee election process, Canadian representation shall be defined as: any company or association incorporated in Canada, any agency of a federal, provincial, or local government in Canada, or any person with Canadian citizenship.

## **Special Elections**

Between regularly scheduled elections, a Segment may hold a special election to replace an existing member or fill a vacant position. A special election request may be requested by petition of ten entities or 25% of the entities registered in a Segment, whichever is less. It is the responsibility of the requester(s) to collect the requisite number of signatories to the petition and submit it to the SPM.

If SPM receives a valid petition for a special election, the SPM shall request that the Segment ratify the need for a special election. Ratification requires approval by a two-thirds majority of the entities registered in the Segment. If the request is ratified by the Segment, the SPM shall initiate the request for nominations and election as described later in this procedure.

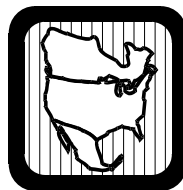
## **Alternative Procedures**

This procedure is provided as the default method for Segments to elect representatives to the Standards Committee. Alternative procedures may be used by a Segment, or jointly by several Segments. Such a procedure shall be consistent with the principles noted in this document. Such a procedure shall be ratified by at least two-thirds of the registered entities in each Segment in which it will be applied, and is subject to review by the NERC Board.

CHI\4513839.1

# Audit of Regional Entity Compliance Programs

Approved by the CCC August 31, 2004  
Revisions approved by the CCC March 16, 2006



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North American Electric Reliability Council  
March 16, 2006

## **Overview**

The NERC process for auditing regional entity compliance programs was established to assess how the regional entity's compliance programs implement the NERC Compliance Enforcement Program and determine their effectiveness. Each year, NERC establishes which standard requirements will be placed into the compliance enforcement program. The regional entities are expected to measure compliance to these requirements and, if desired, additional requirements.

## **Scheduling**

Each regional entity compliance program shall be audited at least once every three years. The schedule for regional entity compliance program audits is approved by NERC staff and the Compliance and Certification Committee.

The audit team consists of at least one representative from each of the following:

- NERC staff,
- Compliance and Certification Committee (one of whom shall serve as team leader), and
- Regional entity compliance manager from another regional entity.

Audit team members shall not be from the regional entity being audited.

## **Pre-Audit**

In preparation for an audit, NERC staff develops a questionnaire that outlines the primary discussion areas to be covered during the on-site audit. The questionnaire includes a list of requested documents, some of which will be provided prior to the meeting and others to be provided and reviewed during the meeting. The questionnaire is sent to the regional entity being audited 60 calendar days in advance of the audit for completion.

Within 30 calendar days prior to the on-site audit, regional entity staff returns a completed questionnaire to NERC, along with the requested reports and documentation. NERC staff sends all of this to each of the team members 10 calendar days prior to the audit.

Audit team members make their own hotel and airline reservations for the audit. The on-site audit is typically scheduled for one and one-half calendar days.

## **On-Site Audit**

During the on-site audit, detailed questions related to the completed questionnaire are discussed by all the participants. The team tours the facilities and meets with the regional entity staff involved in implementing the compliance enforcement program. To determine the effectiveness of the regional entity's program, NERC shall evaluate the goals, tools, and procedures of each regional entity's compliance enforcement program. The audit team debriefs the regional entity staff at the end of the audit with initial findings and preliminary recommendations.

## **Preparation and Posting of the Audit Report**

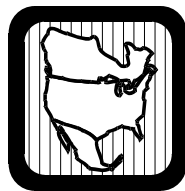
The audit team drafts a report documenting the findings and recommendations of the audit and submits it to the regional entity within 30 calendar days after the on-site audit. The regional entity is provided with a draft of the report to verify that it accurately reflects the discussions at the on-site audit.

The regional entity has 30 calendar days to analyze each recommendation and finding and report to NERC on those it has implemented or plans to implement. If there are recommendations that the regional entity does not plan to implement, its rationale for reaching that conclusion will be provided.

NERC will issue a final report to the regional entity 45 calendar days after the draft report is issued. If the regional entity disputes a finding or recommendation it shall refer to the NERC Rules of Procedure, Sections 409–411 within 15 days of receiving the final report from NERC. Throughout this entire process, the information provided, discussions held, and the draft report will be kept confidential. The final report, along with the regional entity response to the recommendations, are posted on the NERC Web site 15 days after the final report is sent to the region or when due process is complete, whichever is greater.

CHI\4513840.1

# ERO Sanction Guidelines



North American Electric Reliability Council

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## **1. Preamble and Overview**

The electric reliability organization (ERO) and regional entity shall determine and may levy monetary penalties and non-monetary sanctions and remedial actions against owners, operators, and users of the bulk power system for violations of the requirements of ERO Reliability Standards (“reliability standards”) approved by the Federal Energy Regulatory Commission (FERC) and applicable authorities in Canada and/or Mexico. This document sets out the processes and principles to be followed, and factors that will be considered when determining penalties, sanctions, or remedial actions for violations. Collectively these processes, principles and factors are the ERO’s penalties, sanctions, and remedial action guidelines.

The ERO or regional entity will exclusively respect the principles and processes in these ERO Sanctions Guidelines when determining penalties, sanctions, or remedial action for a violation. However, adjustment factors are also provided to afford the ERO or regional entity the flexibility needed to accommodate the facts surrounding each violation. In this manner, rigid prescription of specific penalty formulae can be avoided at the same time that appropriate limitations on the degree of discretion and flexibility available to address each violation on its merits is maintained. The outcome will be remedies that are commensurate and fair compared to the reliability impact of the violation and to remedies levied for similar violations, yet appropriately reflective of any unique facts and circumstances regarding the specific violation and violator.

The adjustment factors established in this document are generally consistent with those listed in the FERC Policy Statement on Enforcement issued on October 20, 2005. However, discussion of the factors presented in this document is not exhaustive as other facets of these factors, or other additional factors not discussed herein, may also be considered to determine a given penalty, sanction, or remedial action, as the ERO or regional entity deems appropriate under the circumstances.

Regional entities shall follow these guidelines to determine penalties, sanctions, or remedial actions. The ERO shall oversee the regional entities’ application of the guidelines to ensure that acceptable levels of consistency are achieved. The ERO’s oversight will also ensure comparable outcomes; i.e. that there is acceptable similarity in the degree and type of sanction for violations constituting comparable levels of threat to reliability of the bulk power system. In order to facilitate this oversight, regional entities’ reporting to the ERO of penalties and sanctions they have determined will be thorough and in sufficient detail that the ERO can understand and reasonably replicate the outcomes reached; the ERO may develop reporting requirements or a standard reporting form for use by the regional entities for this purpose, as the ERO deems necessary or appropriate.

As experience is gained by the ERO and regional entities through the use and application of these guidelines, the ERO will review the guidelines and may modify them as the ERO deems appropriate or necessary. Authority delegated by the ERO to regional entities with respect to penalties, sanctions, or remedial actions does not include the authority to modify these guidelines.

Any revision to this document or to the principles and factors identified or addressed within it must first be approved by the NERC board, then by FERC, appropriate authorities in Canada or appropriate authorities in Mexico prior to becoming effective and applicable within the United States or these authorities’ respective jurisdictions.

## **2. Document Scope and Exclusions**

This document identifies and discusses the processes and principles to be followed, and factors that will be considered to determine penalties, sanctions, or remedial actions for violations of the reliability standards.

This document notes but does not otherwise address the progression of actions and steps that the ERO or regional entity will follow to process a violation from its initial incoming status upon discovery as a probable violation, through to its possible final determination as a post-appeal confirmed violation. This is set out in the ERO's Rules of Procedure Section 400 and applicable regional entity program documents.

This document notes but does not otherwise address how an alleged violation is reviewed in order to confirm or dispel it. The ERO process and requirements for this are set out in the ERO Rules of Procedure Section 400. Regional entities will undertake such reviews either using the processes and requirements set out in the Rules of Procedure or using their own documented process that has been reviewed and approved by the ERO as meeting ERO requirements for such a process.

This document notes but does not otherwise address the processes and procedural steps by which a violation can be appealed, or by which a penalty, sanction, or remedial action determined and levied for a violation can be appealed. These are set out in the ERO's Rules of Procedure Section 400 and applicable regional entity program documents.

Section 403 part 18 of the ERO's Rules of Procedure provides for the possibility of settlements within the ERO or regional entity compliance enforcement programs. This document makes reference to settlements to but does not address them further.



### **3. Basic Principles**

The following identify and discuss the basic principles underpinning why and how the ERO and regional entities will determine penalties, sanctions, and remedial actions for violations of the requirements of the reliability standards.

The principles are unique and complimentary; the order in which they are presented does not set or indicate order of precedence.

#### **3.1 Necessary Element of ERO Compliance Program**

Primary objectives of the ERO include the promotion and enforcement of compliance with the reliability standards by owners, operators, and users of the bulk power system; standards made mandatory by duly-authorized legislative bodies in the U.S and Canada, and designed to maintain and promote the reliability of the two countries' shared power grids. Consistent with these objectives, the ERO and regional entities will monitor and act to verify compliance with standards' requirements; however, beyond monitoring and acting only to verify compliance, the ERO and regional entities will also hold bulk power system owners, operators, and users — or their delegates — accountable for confirmed compliance violations. This accountability will include determination and the possible levying of penalties, sanctions, or remedial actions.

Penalties, sanctions, and remedial actions are valid and necessary mechanisms to the ERO and regional entities for the enforcement and promotion of compliance to the reliability standards, in part because they can:

- a. promote compliance behavior;
- b. provide deterrence to future incidents, actions or situations of noncompliance by the violator or others;
- c. implement actions that will promptly correct behavior;
- d. disgorge benefits that may or may have accrued to a violator as a consequence of violating;
- e. visit upon a violator some portion of any damage their violation may or may have visited upon others.

Accordingly, the determination and potential levying of appropriate penalties, sanctions, or remedial actions by the ERO or regional entity upon those responsible for violations shall be a required step within the ERO' and regional entities' compliance enforcement programs.

#### **3.2 Settlement of Compliance Violations**

The ERO and regional entities shall maintain the reliability of the bulk power system by enforcing compliance with NERC and regional entity reliability standards. The ERO and regional entity compliance enforcements programs will lay out how the ERO and regional entities will do this. In particular and by necessity, elements of these programs regarding the confirmation of violations, the determination and levying of penalties, sanctions, or remedial actions, and appeals are rigid and legalistic in form and nature in order to respect the basic tenets of due process and natural justice inherent within United States and Canadian justice systems, respectively, upon which they are being based. However, absolute adherence to the compliance programs, to the exclusion of other options, may not be the most appropriate, efficient or desirable means by which to achieve the end goal in all circumstances, to all entities party to a violation.

As set out in the ERO Rules of Procedure Section 403 Part 18, violations of the reliability standards may be dealt with through settlements reached between the ERO, regional entity and the entity or entities to whom a potential, alleged, or confirmed violation is attributed to by the ERO or regional entity. Any provisions made within a settlement regarding penalties, sanctions, or remedial actions can supersede any corresponding penalties, sanctions that would otherwise be determined pursuant to these guidelines.

### **3.3 Settlement Request**

At any point in the determination and levying of a penalty, sanction, or remedial action pursuant to these guidelines, any entity found in or being investigated for a violation may request a settlement; at no point within the processes and procedures, etc, described by these guidelines is the option of settlement not available.

### **3.4 Settlement Effect on Continuation of Determination of Penalties, Sanctions, or Remedial Actions**

Until a settlement is finalized or parties to that settlement agree otherwise, the ERO or regional entity may continue activities and actions towards the determination and levying of a penalty, sanction, or remedial action that would otherwise be applicable pursuant to these guidelines, or that will be applicable if the settlement is not finalized.

### **3.5 Timing of Determination of Penalty, Sanction or Remedial Action**

All probable violations will be reviewed by the ERO or regional entity with the outcome that either the violation will be confirmed or the violation will be dispelled.

The determination of penalty, sanction, or other remedial action for a violation will generally be undertaken when a violation is confirmed.

At any time during confirmation review, hearing, or appeals the ERO or regional entity may determine that remedial action is warranted. The ERO or regional entity may direct a violator — alleged or otherwise — to take such remedial actions at any time, including prior to confirmation of a violation, and without regulatory approval.

### **3.6 Determining Party**

The determination of penalty, sanction or other remedial action for a violation will generally be undertaken by the same entity undertaking the confirmation review of that violation.

### **3.7 No Influence of Penalty, Sanction or Remedial Action upon Violation Confirmation Process**

The penalty, sanction, or remedial action determined for a violation will not influence the outcome of the regional entity' or ERO's confirmation review of the violation. In particular, if the determination of penalty, sanction, or remedial action for a probable violation is being undertaken by the same entity undertaking the confirmation review, the entity will insure that there is sufficient separation, in such terms as time, process, personnel or the like, to preclude that the penalty, sanction, or remedial action determined influences the outcome of the confirmation review.

### **3.8 Reasonable Relationship to Violation**

Penalties, sanctions, and remedial actions levied or applied for the violation of a reliability standard shall bear a reasonable relation to the seriousness of the violation while also reflecting consideration of the factors that these guidelines direct to take into account.

### **3.9 Use and Facets of Factors to Determine Penalties**

Penalties levied for a given violation will be based on all facts and other information relevant to the incident or situation. To that end, these guidelines include factors which the ERO and regional entities will consider while determining the penalty or sanction to be levied.

The ERO considers, and these guidelines direct, that the presence of some factors within a violation aggravates the seriousness of that violation and should cause an increase or expansion of the penalty to be levied. Conversely, the presence of some other factors mitigates that seriousness and should cause a decrease or reduction of the penalty to be levied. Also, some factors may mitigate or aggravate, and should have commensurate impact. The ERO considers, and these guidelines direct,

that the absence of an aggravating or mitigating factor will have no impact, as opposed to a mitigating or aggravating impact, respectively, to a penalty.

This document presents many of the relevant facets of the factors included in these guidelines. However, additional facets of these factors, or additional factors not discussed herein, may also be considered to determine a given penalty, sanction, or remedial action, as the ERO or regional entity deems appropriate under the circumstances. Where additional factors or facets are used they will be identified and their use will be justified. The effect of using these factors or facets on the penalty, sanction, or remedial action determined will also be fully and clearly disclosed.

### **3.10 Multiple Violations**

A violation is a failure or inadequacy to meet a requirement of a reliability standard by a party responsible to comply with that requirement.

The failure or inadequacy of a violator to comply may involve more than one standard or several requirements of a single standard; as such, multiple individual violations may be in play when penalties, sanctions, or remedial actions for an incident or situation of noncompliance are being determined.

Strictly speaking, the ERO or regional entity can determine and levy a separate penalty or sanction, or direct remedial action, upon a violator for each individual violation. However, in instances of multiple violations related to a single act or common incidence of noncompliance, the ERO or regional entity will generally determine and issue a single aggregate penalty, sanction, or remedial action directive bearing reasonable relationship to the aggregate of the related violations. The penalty, sanction, or remedial action will not be that determined individually for the least serious of the violations; it will generally be at least as large or expansive as what would be called for individually for the most serious of the violations.

### **3.11 Violator Size**

Penalties levied for the violation of a reliability standard shall consider the size of the violator relative to other owners, operators, and users of the bulk power system with the result that, on the basis of this factor, larger and smaller penalties, respectively, will generally be determined for larger and smaller violators for a comparable violation. This will ensure that violators are penalized or sanctioned commensurate with the risk or effect of their violation upon the reliability of the bulk power system as a consequence of their size and respective reliability exposure to the bulk power system. It is also intended to ensure that, while remaining appropriate for the violation, no penalty levied is either overly burdensome or inconsequential to the violator by virtue of their size.

The attribute used to measure a violator's size shall be appropriate for the nature of the reliability standard requirement(s) violated; for example, violations of standards related to generation shall generally use an attribute related to generator size whereas violations of standards related to transmission shall consider the violator's transmission circuit mileage and the voltage class of that transmission.

Where a violator is registered as more than one type of functional entity (e.g. as both a transmission owner and a generation owner) or as a functional entity whose size can be measured by more than one attribute (e.g. a reliability coordinator), the violator's aggregate size shall be considered; regional entities may consult the ERO for guidance or assistance in this situation.

Where a violator is a registered entity within more than one region's footprint the regional entity shall consult the ERO for guidance respecting consideration of the violator's size.

### **3.12 Time Horizon**

Reliability standards involving longer and broader time horizons, such as long-term planning activities, may have a lesser immediate impact and pose less immediate risk to the reliability of the bulk power system than standards addressing shorter and narrower timeframes, such as entities' conduct in real time. Similarly, standards involving longer and broader time horizons typically will provide a longer time period over which to discover and remedy a violation when compared to standards addressing more immediate activities such as next-day planning, same-day operations or real-time operations.

Penalties levied for the violation of a reliability standard shall consider the time horizon of the standard violated; violations of standards involving more immediate or real-time activities will generally incur larger penalties than violations of standards with longer or broader horizons.

### **3.13 Egregious Conduct; Extenuating Circumstances**

Generally speaking, the effects of the various factors will be compounded together somewhat formulaically to determine the penalty for a violation. However, it is recognized that there may be circumstances where the conduct of the violator is so egregious that the full use of the ERO's and regional entity's penalty authority is necessary regardless of the presence of other factors. Conversely, in unique extenuating circumstances, such as significant natural disasters, penalties may be significantly reduced or eliminated.

### **3.14 Concealment or Intentional Violation**

Penalties levied for the violation of a reliability standard shall always take into consideration any attempt by a violator to conceal the violation from the ERO or regional entity, or any intentional violation incurred for purposes other than a demonstrably good faith effort to avoid a significant and greater threat to the immediate reliability of the bulk power system. Attempts to conceal and intentional violations will be reviewed as potentially egregious conduct by the violator.

### **3.15 Economic Choice to Violate**

Owners, operators, and users of the bulk power system may be presented with situations or circumstances where compliance with the reliability standards preclude or reduce an economic gain that could be realized by violating the standards. Penalties shall be sufficient to assure that entities responsible for complying with reliability standards do not find it attractive to make economic choices that cause or unduly risk violations to reliability standards, or risk or cause incidents resulting from violations of the reliability standards. Penalties levied to violators who have made such a choice shall reflect this aspect of the violation.

### **3.16 No Influence by Outcome of Economic Choice to Violate**

Economic choices to violate are generally made for the violator's own potential gain, but making such a choice does not always result in all potential gains being realized or may result in damage or loss. However, irrespective of the outcome to the entity making an economic choice to violate, such decisions risk others' reliability, commonly without either their knowledge or consent. Penalties levied to violators making an economic choice to violate shall reflect only that the choice was made at all; the lack of or reduced magnitude of any actual benefit received, or any damage suffered, by the violator as a consequence of making this choice will have no influence on the determination of the penalty to be levied.

### **3.17 Non-Monetary Sanctions or Remedial Actions**

Enforcement actions taken by the ERO or a regional entity are not limited to monetary penalties; at the discretion of the ERO or regional entity, sanctions, or remedial actions may also be applied and can include limitations on activities, functions, operations, or other appropriate sanctions, including the establishment of a reliability watch list composed of major violators.

### **3.18 Non-Exclusiveness of Monetary Penalties or Non-Monetary Sanctions**

A non-monetary sanction may be imposed either in lieu of or in addition to a monetary penalty imposed for the same confirmed violation, and vice versa. Imposition of a monetary penalty or non-monetary sanction for a violation does not preclude the imposition of the other as long as, in combination, the aggregate penalty continues to bear a reasonable relation to the seriousness of the violation.

### **3.19 Monetization of the Value of Sanctions**

A significant element of the ERO's oversight of penalties, sanctions, and remedial action determined and levied by regional entities is ensuring acceptable similarity in the degree and type of sanction for violations constituting comparable levels of threat to the reliability of the bulk power system. It is also a requirement and a commitment of the ERO and its designees that penalties, sanctions, or remedial actions levied or applied for the violation of a reliability standard bear reasonable relation to the seriousness of the violation. Specifically with respect to penalties and sanctions, it is intuitive that it will be easier, more objective, and more transparent to monitor and test for acceptable similarity if (monetary) penalties or monetized values of sanctions determined for violations are used as the primary basis of comparison, versus comparisons made on the basis of other (non-monetized) considerations. Similarly, there will be strong intuitiveness and transparency, particularly to those interested but not strongly familiar with the power industry, that the seriousness of a violation has been reasonably addressed if the consequences for it to the violator are determined and can be expressed clearly and quantifiably in monetary terms.

Penalties determined and levied by the ERO or regional entities will by definition be valued in monetary terms: U.S or Canadian dollars. It will be the preference of the ERO that (non-monetary) sanctions imposed either in lieu of or in addition to a penalty include disclosure of the monetary value that the sanctions represent to the violator. It is intuitive that defensible monetary values for those sanctions will be most easily determined if the penalty for the violation pursuant to these guidelines is first determined and then the sanctions to be levied are introduced and justified as appropriate alternatives to that penalty or additions to a lesser penalty. However, sanctions may be determined directly (e.g. without first determining a penalty amount) and monetized using other methods.

The ERO does not have a preference between penalties and sanctions for violations. The preference expressed here will support ensuring comparability of outcomes regarding application of these guidelines and the promotion of reasonable relationship between the seriousness of a violation and the sanctions, or penalties and sanctions, levied for it.

### **3.20 Maximum Limitations on Penalties**

Penalties are direct, monetary judgments levied against a violator by the ERO or regional entity for the violation of requirements of the reliability standards. In contrast, sanctions will impose limitations or restrictions of some kind that may result in economic or other impacts to the violator, and remedial actions are directives by the ERO or regional entity to the violator regarding the correction of conditions, practices or any other relevant action or activity underlying the noncompliance(s) involved.

In the United States, the Federal Power Act now allows for the imposition of civil penalties of up to \$1 million per day per violation. Accordingly, because the ERO and ERO designees draw their authority to levy penalties from the Federal Power Act, this figure is the maximum monetary penalty that the ERO or ERO designees could levy.

In Canadian jurisdictions the maximum monetary penalty potentially assessable for a reliability standard violation is significantly less than the amount allowed in the United States under the Federal Power Act. Also, legislation presently governing some Canadian jurisdictions does not accommodate the levying of such a penalty under some circumstances, may not accommodate the levying of such a penalty for all violations, or does not accommodate the levying of any monetary penalties.

When a penalty may be levied, or proposed to regulatory authorities with jurisdiction to be levied, the following steps will be followed:

- a. The ERO or regional entity will initially disregard the penalty limitations of the regulatory authorities with jurisdiction, and determine what the penalties or sanctions would be pursuant to these sanction guidelines only.
- b. The ERO or regional entity will review the maximum penalty allowed by the regulatory authorities with jurisdiction.
- c. The ERO or regional entity will set the actual penalty to be levied, or proposed to the regulatory authorities with jurisdiction to be levied, as the lesser of that determined pursuant to these guidelines and the maximum penalty or sanction allowed by the regulatory authorities.
- d. If the lesser penalty is the maximum penalty allowed by the regulatory authorities, the notice of penalty or similar document issued by the ERO or regional entity regarding the violation will also list the penalty that was determined pursuant to these guidelines.

Adhering to the above steps will insure that result of the determination of any penalty for any violation will produce output that can be directly compared (i.e. without influence of local authorities' penalty limitations or restrictions) with the penalty determined for any other violation, assisting efforts of the ERO and others to ensure that these guidelines are uniformly applied and that there is an acceptable level of consistency in the application of these sanction guidelines across North America. Regulatory authorities with jurisdiction may also find such information useful for their determination of the appropriateness of any penalty or sanction proposed to them to be levied. Similarly, policy and legislative bodies may find such information of value to the review or development of arrangements addressing such matters.

## **4. Determination of Monetary Penalties**

The following describes the steps that the ERO or regional entity will follow to determine the monetary penalty for a violation. As discussed previously, with respect to timing, this determination will generally be undertaken once a violation has been confirmed. The determination of non-monetary sanctions is discussed in Section 5 of this document; Section 6 discusses remedial action.

Briefly, a monetary penalty will be determined as follows:

- Step 1. As discussed in Section 4.1, a base penalty amount for the violation will be determined based upon the risk factor set for the reliability standard requirement violated and the degree (i.e., severity) to which the violator violated that requirement.
- Step 2. The base penalty amount determined in Step 1 can be adjusted for the size of the violator and for the time horizon involved in the violation. This is discussed in Section 4.2. The outcome of this step will produce the interim final penalty for the violator for the violation.
- Step 3. The interim final penalty will be reviewed, as discussed in Section 4.3, for determination of the final penalty that should be levied or proposed to be levied upon the violator. This step engages the majority of factors discussed in Section 3.2 of these guidelines.

### **4.1 Base Penalty Amount**

The starting point for determining the monetary penalty for a given violation is its base penalty amount. This is determined by evaluating two factors regarding the violation - its violation risk factor and its violation severity factor – and then looking up the corresponding base penalty amount listed in the Base Penalty Amount Table provided in Appendix A. The penalty amount is listed in the table as the ‘standard penalty’ amount.

#### **4.1.1 Violation Risk Factor**

Each requirement set out within the reliability standards has been<sup>1</sup> assigned a violation risk factor (VRF). The factor associates violation of the requirement with the expected or potential impact of the violation to the reliability of the bulk power system. One of three defined levels of risk is assigned:

- a. Lower Risk Factor — Requirements assigned a Lower risk factor are generally administrative in nature. Violation of such a requirement is not generally expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system.
- b. Medium Risk Factor — Violations of requirements assigned a Medium risk factor generally have or had the potential to directly affect the electrical state or the capability of the bulk power system, or the ability to effectively monitor and control the bulk power system, up to but excluding bulk power system instability, separation, or cascading failures.
- c. High Risk Factor — Violations of requirements assigned a High risk factor generally have or had the potential to directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures; or did or could have placed the bulk power system at an unacceptable risk of instability, separation, or cascading failures.

#### **4.1.2 Violation Severity Level**

Violation severity levels (VSLs) are defined measurements of the degree to which a violator violated a requirement of a reliability standard. Whereas violation risk factors are determined pre-violation and indicate the relative potential impacts that violations of each standard could pose to the reliability of the bulk power system, the violation severity level of a violation is

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<sup>1</sup> Assignment of these factors is scheduled to be complete by the end of 2006.

assessed post-violation and is an indicator of how severely the violator actually violated the standards requirements in question.

These guidelines utilize the violation severity levels that have been established<sup>2</sup> by the ERO for requirements of the reliability standards. Up to four levels can be defined for each requirement; the levels have been designated as: Lower, Moderate, High, and Severe.

#### **4.2 Violator Size and Violation Time Horizon Adjustment**

The ERO or regional entity will consider adjusting the penalty for the violation to reflect the violator's size. Penalty adjustments made for the size of the violator will use an attribute of size, or a combination of such attributes, appropriate for the nature of the standard, the violator and the violation.

The ERO or regional entity will consider adjusting the penalty for the violation to reflect the time horizon of the standard violated; all other considerations being similar (i.e., violation VRF and VSL; violator size) violations of standards involving immediate or real-time activities should generally incur larger penalties than violations of standards with longer or broader horizons.

In addition to listing the standard penalty amount for each combination of violation risk factor and violation severity factor, the Base Penalty Amount Table provided in Appendix A also indicates an upper and lower limit within which the penalty determined for the violation can be set to account for violator size and violation time horizon.

After considering the violator's size and the violation's time horizon the ERO or regional entity may set the penalty amount for the violation as other than the standard penalty amount determined in Step 1, above; however, the penalty when adjusted for these factors shall remain within the upper and lower violator size & time horizon limits indicated in the Base Penalty Amount Table.

The penalty amount in play after consideration of the violator's size and the violation's time horizon will be the interim final penalty used as the starting point for consideration of the remaining factors addressed in section 4.3.

Regional entities considering these factors may consult the ERO for guidance or assistance with doing so.

#### **4.3 Final Adjustment Factors**

Final adjustment factors provide the greatest opportunity to the ERO or regional entity to adapt the penalty to be assessed to the specific facts and circumstances surrounding each violation. Accordingly, they are likely the most critical factors to be considered in the determination of a penalty or sanction.

Final adjustment factors may be used to (mathematically) compound an interim final penalty; however, in the alternative and when the ERO or regional entity deems appropriate, they may also be used to determine a penalty somewhat irrespective or independently of that penalty amount.

Some final adjustment factors may generally be relevant to and consider only the facts and circumstances of the violator and violation in question; others may consider a broader scope.

At this time, these guidelines recognize and require that the ERO or regional entity consider the following:

- a. Repetitive violations and the violator's compliance history
- b. Failure of the violator to comply with compliance directives

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<sup>2</sup> Assignment of these levels is scheduled to be complete by the end of 2006.



- c. Self-disclosure and voluntary corrective action by the violator
- d. Degree and quality of cooperation in violation investigation and remedial action
- e. The presence and quality of the violator's compliance program quality
- f. Any attempt at violation concealment by the violator
- g. Intentional violations
- h. Extenuating circumstances
- i. Egregious conduct

Two documents issued by United States regulatory agencies will be instructive to the ERO and regional entities when they are determining penalties for violations of the reliability standards: the FERC's Policy Statement on Enforcement issued on October 20, 2005 under Docket No. PL06-00, and; U.S Securities and Exchange Commission (SEC) Release No. 44969 under the Securities and Exchange Act of 1934, issued on October 23 2001, also concurrently issued by the SEC as Release No. 1470 under Accounting and Auditing Enforcement.

#### **4.3.1 Repetitive Violations and Compliance History**

A bulleted point under Paragraph 20 of the FERC Policy Statement on Enforcement highlights repeat offenses by a violator. If a violator has had repetitive infractions of the same or a closely-related reliability standard requirement the ERO or regional entity shall consider some increase to the penalty.

#### **4.3.2 Failure to Comply with Compliance Directives**

If the violator has violated reliability standard requirements notwithstanding having received related compliance directives, such as for remedial action from the ERO or regional entity, the ERO or regional entity shall consider some increase to the penalty.

#### **4.3.3 Self-Disclosure and Voluntary Corrective Action**

The ERO or regional entity shall consider whether a violator self-disclosed the violation prior to detection or intervention by the ERO or regional entity, and any action undertaken by the violator to correct the situation. The ERO or regional entity will be instructed in their consideration of these factors by the text of Paragraphs 24 and 25 of the FERC Policy Statement on Enforcement. As they deem warranted, the ERO or regional entity may reduce the violator's penalty consistent with the cited sections of the FERC policy.

#### **4.3.4 Degree and Quality of Cooperation in Violation Investigation and Remedial Action**

The ERO or regional entity shall consider the degree and quality of the violator's cooperation with the ERO or regional entity in the investigation of the violation and any remedial action arising from it. The ERO or regional entity will be instructed in making their determination on this by the text of Paragraphs 26 and 27 of the FERC Policy Statement on Enforcement. The ERO or regional entity may adjust the violator's penalty as they deem warranted commensurate with the cited sections of the FERC policy statement. This may result in an increase, a decrease or no change to the penalty.

#### **4.3.5 Presence and Quality of Compliance Program**

The ERO or regional entity shall consider the presence and quality of the violator's compliance program. The ERO or regional entity will be instructed in making their determination on this factor by the text of Paragraphs 22 and 23 of the FERC Policy Statement on Enforcement. As they deem warranted, the ERO or regional entity may reduce the violator's penalty consistent with the cited sections of the FERC policy. Consistent with

the FERC policy the ERO or regional entity may not increase a violator's penalty specifically on the grounds that the violator has no program or a poor quality program.

#### **4.3.6 Violation Concealment**

Two bulleted points under Paragraph 20 of the FERC Policy Statement on Enforcement highlight misrepresentation of material facts and resistance or impediment to inquiry of a violation. When determining a penalty the ERO or regional entity shall consider any concealment or attempt to conceal the violation, or information needed to investigate the violation, on the part of the violator. If the violator concealed or attempted to conceal, some significant increase to the penalty shall be considered; doubling of the penalty otherwise determined is suggested. Conduct of this nature on more than one occasion regarding one violation, or with respect to more than one violation, may be deemed by the ERO or regional entity as egregious behavior and dealt with accordingly.

#### **4.3.7 Intentional Violation**

Another bulleted point under Paragraph 20 of the FERC Policy Statement on Enforcement highlights offenses as willful action by a violator. When determining a penalty the ERO or regional entity shall consider if the violator intentionally violated without just cause; i.e., for purposes other than a demonstrably good faith effort to avoid a significant and greater threat to the immediate reliability of the bulk power system. If the violator engaged in such conduct, some significant increase to the penalty shall be considered; doubling of the penalty otherwise determined is suggested. Conduct of this nature, particularly if detected on more than one occasion, may also be deemed by the ERO or regional entity as egregious behavior and dealt with accordingly.

The ERO or regional entity will consider violations attributable to an economic choice to violate as intentional violations. Consistent with the FERC Policy Statement on Enforcement any penalty issued involving conduct of this manner shall as a minimum disgorge any profits or economic benefits acquired as a consequence of the behavior, whenever and to the extent that they can be determined or reasonably estimated.

#### **4.3.8 Extenuating Circumstances**

The ERO or regional entity will consider if there are extenuating circumstances regarding the violation to justify reduction or elimination of the penalty otherwise determined.

Consideration of adjusting a penalty for this factor would be inconsistent with the ERO or regional entity increasing a penalty after consideration of any other factor included in this section of these guidelines, such as intentional violation without justifiable cause or concealment or attempt to conceal. It would also be inconsistent with respect to violations where the ERO or regional entity has deemed that the violator's conduct was egregious.

#### **4.3.9 Egregious Conduct**

This adjustment considers and is triggered when the ERO or regional entity deems that the violator's conduct was egregious. In this circumstance, the ERO or regional entity may increase the penalty levied, or proposed to be levied, as deemed appropriate by the ERO or regional entity, up to and including the maximum allowable penalty.

## **5. Determination of Non-Monetary Sanctions**

The imposition of sanctions is not bounded to monetary penalties. Non-Monetary sanctions applied must be applied with the objective of promoting reliability and compliance with the reliability standards. Non-monetary sanctions may include, but not be limited to, the following:

- a. Limitations on activities, functions, or operations
- b. Placing an entity on a reliability watch list composed of major violators

- c. Notification of boards of directors, regulators, and others

## **6. Remedial Action**

### **6.1 Definition and Anticipated Use**

Remedial actions are directives that may be issued to a bulk power system owner, operator, or user to resolve a specific reliability standard violation by addressing conditions, practices, or any other relevant action or activity. A remedial action directive will be issued when the ERO or regional entity identifies a violation of a reliability standard that must be corrected to promptly reduce the reliability threat that the ERO or regional entity has identified poses to the reliability of the bulk power system.

The ERO or regional entity will generally employ remedial action directives where they deem it necessary to clearly specify minimum corrective actions that the subject of the remedial action directive must take; additionally or alternatively a remedial action directive may clearly specify timelines within which the subject must take specified actions, complete specified tasks, or achieve specified outcomes. Also, to the extent the ERO or regional entity is authorized to do so, a remedial action directive may communicate penalties, sanctions, or further remedial actions that may be imposed should the specific remedial action directive not be complied with by those to whom it has been issued. As a rule of thumb, remedial action directives will be of use to the ERO or regional entity whenever any significant combination of specificity, clarity, or time is of the essence to address a threat to the reliability of the bulk power system brought on by lack of or inadequate compliance to the reliability standards.

### **6.2 Compliance Requirements**

In the United States, the Federal Power Act stipulates that owners, operators, or users of the bulk power system are expected comply with remedial action directives issued to them by the ERO or a regional entity. Noncompliance with a remedial action directive may result in a substantially increased penalty or sanction.

Remedial action directives issued by the ERO or regional entity will include a deadline by which time the owner, operator, or user must complete requirements set out in the order, and by which time the entity must demonstrate compliance to the remedial action directive to the ERO or regional entity that issued it. Failure or refusal to meet the requirements or deadlines set out in a remedial action directive may itself result in further remedial action directives or significantly increased penalties or sanctions by the ERO or regional entity.

### **6.3 No Obligation to Issue**

The ERO or regional entity may, but is not obligated, to issue remedial action directives. Lack of being issued a remedial action directive does not relieve an bulk power system owner, operator, or user from any responsibilities they otherwise have to comply or maintain compliance with requirements of the reliability standards. Remedial action directives will be used by the ERO or regional entities only as they deem warranted, when they deem warranted.

### **6.4 Scope of Application**

The scope of remedial action directives issued by the ERO or regional entity will be limited to conditions, practices, or any other relevant actions or activities resulting in noncompliance, or that the ERO or regional entity considers at significant risk of becoming noncompliant, to requirements of the reliability standards. However, beyond merely directing compliance or improved compliance with standards' requirements, where the ERO or regional entity is authorized to do so, the directive may also stipulate how compliance or the improvement to compliance is to be achieved.

### **6.5 Availability**

In the United States, the Federal Power Act provides that the ERO or regional entity can issue a remedial action directive prior to completion of the confirmation review of a probable violation, or prior to the determination of a penalty or sanction for that violation. The Federal Power Act also

indicates that it is not necessary for the ERO or regional entity to acquire the FERC or other regulators' approval prior to issuing remedial action directives. Accordingly, the ERO or regional entity may issue remedial action directives to entities in the United States whenever they deem it necessary or otherwise warranted to do so. Also, the ERO or regional entity may issue remedial action directives to entities in the United States regarding a violation, irrespective of whether that violation is ultimately verified or dispelled by the ERO or regional entity's investigation of the violation.

#### **6.6 No Impact on Confirmation of Violation, or Penalties or Sanctions**

Remedial action directives issued regarding a violation, in particular any costs incurred by the violator to comply with any such directive, will not be considered when reviewing whether the aggregate of any penalties and sanctions levied for that violation bear a reasonable relation to the seriousness of the violation. Also, any remedial action directives issued with respect to a violation will not influence the outcome of the confirmation review of that violation nor the determination of penalties or sanctions for that violation; ordering a violator to correct what needs correcting anyway is no grounds for dispelling a violation nor reducing or eliminating a penalty or sanction that would otherwise be determined appropriate for the violator for that violation.

#### **6.7 Types of Remedial Actions**

NERC or the regional entities may issue remedial action directives to correct compliance with NERC or regional reliability standards and reduce or eliminate threats to the reliability of the bulk power system. Examples of remedial actions include:

- a. Specifying operating or planning criteria, limits, or limitations
- b. Requiring specific system studies
- c. Defining operating practices or guidelines
- d. Requiring confirmation of data, practices, or procedures through inspection testing or other methods
- e. Requiring specific training for personnel
- f. Requiring development of specific operating plans

## Appendix A: Base Penalty Amount Table

The following lists the base penalty amounts corresponding to combinations of violation risk factor and violation severity factor.

Violation Risk Factor	Violator Size & Time Horizon Limits	Violation Severity Level			
		Lower (Level 1)	Moderate (Level 2)	High (Level 3)	Severe (Level 4)
Lower	Standard Penalty	<b>\$1,000</b>	<b>\$3,000</b>	<b>\$6,000</b>	<b>\$10,000</b>
	Lower	\$1,000	\$1,000	\$1,500	\$2,000
	Upper	\$2,000	\$6,000	\$12,000	\$20,000
Medium	Standard Penalty	<b>\$5,000</b>	<b>\$15,000</b>	<b>\$25,000</b>	<b>\$40,000</b>
	Lower	\$2,000	\$3,000	\$5,000	\$8,000
	Upper	\$10,000	\$30,000	\$50,000	\$80,000
High	Standard Penalty	<b>\$35,000</b>	<b>\$50,000</b>	<b>\$70,000</b>	<b>\$100,000</b>
	Lower	\$7,000	\$10,000	\$14,000	\$20,000
	Upper	\$70,000	\$100,000	\$140,000	\$200,000

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# Organization Registration and Certification Manual

Version 3.3



North American Electric Reliability Council

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## **Section I — Executive Summary**

### **Overview**

The NERC Compliance and Certification Committee (CCC) is responsible for developing and approving these processes. The CCC is comprised of representatives from a diverse set of industry segments and therefore represents the industry as a whole. Industry participants have input into the development and revision of this process through their segment representatives on the CCC.

The purpose of this document is threefold: (1) to define the registration process and to identify which functional entities must register as owners, operators, and users of the bulk power system required to comply with reliability standards; (2) to define the organization certification process; and (3) to define the transitional organization certification process and to identify which functional entities are eligible to use the transitional organization certification process.

In the fall of 2004 NERC requested that entities responsible for reliability coordinator, balancing authority, transmission operator, planning authority, and transmission planner function identify to their respective regional entities which of these functions they were currently responsible for. At that time information concerning the name of the organization, a contact name, and the footprint for which they had responsibility was required. Although the Functional Model identified 16 entities, only these five entities needed to provide information. Certification standards associated with the NERC Reliability Standards are under development and additional information and relationships need to be defined for these five entities as well as other functional entities.

### To Whom Does This Document Apply?

All industry participants responsible for, or intending to be responsible for, the following functions must register with NERC through the organization registration process. The entities are defined in the NERC Glossary of Terms used in reliability standards with responsibilities designated by the individual standards.

	<b>Entities that Must Register by 3/15/2006</b>	<b>Entities that will need to be certified</b>
Reliability Coordinator	√*	√
Transmission Operator	√*	√
Balancing Authority	√*	√
Planning Authority	√*	
Transmission Planner	√*	
Transmission Service Provider	√	
Transmission Owner	√	
Resource Planner	√	
Distribution Provider	√	
Generator Owner	√	
Generator Operator	√	
Load-serving Entity	√	
Purchasing-Selling Entity	√	
Market Operator		
standards Developer		
Compliance Monitor	√	

\*These entities may have already submitted initial mapping information through a pre-registration process, and must now complete a full registration which includes, but is not limited to, updating and verifying this previous information.

### What Processes Will Be Used?

	<b>Registration</b>	<b>Certification</b>
Existing Certified Control Areas	√	√*
Existing Non-Certified Control Areas	√	√
Existing Reliability Coordinators	√	√
New BA, TOP, and RC	√	√
TP and PA	√	<b>n.a.</b>
Other FM entities	√	<b>n.a.</b>

\*At its discretion, a regional entity may accept use of the transitional certification process in lieu of the full certification process.

## When will These Processes Begin?

**Registration began in January of 2006.** Registration for new entities will be ongoing. If a registered entity's information changes, a new application form indicating the changes must be submitted.

**Certification** will begin upon implementation of the organization certification standards, expected to be about September 1, 2006, and must be completed for the existing entities by December 31, 2008. Certification will be ongoing for new entities.

**Transitional certification** of certified control areas to the certified functional entities will begin upon implementation of the organization certification standards, expected to be about September 1, 2006, and must be completed by December 31, 2008.

## Where to Access and Submit Form(s)?

Registration and certification forms will be available on the NERC Web site and may be available by the regional entities through their respective Web sites. Completed forms are to be sent electronically to the compliance and certification manager of the applicant's regional entity.

According to the *Role of the Regions*<sup>1</sup> document, it is desirable that entities operate within a single reliability region; however, if an applicant operates in more than one region, they must complete and submit separate registration applications to each of those regions.

## Roles and Responsibilities

The following is a high-level overview of the roles and responsibilities in the registration and certification processes:

### NERC

1. Oversight of entity processes performed by the regional entities, including:
  - a. Governance as per the regional entity's delegation agreement with NERC.
  - b. Coordination of process execution when applicants are registering and/or certifying in multiple regional entities.
2. NERC acronym management, including:
  - a. Issue acronym to entity and inform regional entity.
  - b. Ensure entities have only one acronym for all regional entities in which they operate.
3. Make modeling changes based on registration information.
4. Maintain accurate registration and certification records.
5. Publish up-to-date list of functional entities.

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<sup>1</sup> "Role of the Regional Reliability Councils: Follow-up Report" prepared by the Regional Managers Committee for the NERC Members Committee meeting on May 2, 2005.

### **Regional Entity**

1. Performs data collection and mapping of footprints.
2. Approves entity registration applications.
3. Approves entity certification applications.
4. Notifies NERC of entities registered within the regional entity.
5. Notifies NERC of entities certified within the regional entity.
6. Ensures entity obtains acronym from NERC.
7. Ensures that all bulk power system assets within its footprint are within the footprint of a registered entity.

### **Applicant**

1. Complete and submit registration and/or certification application.
2. Submit updates to registration and/or certification information as necessary and/or requested.
3. Respond to regional entity and/or NERC questions pertaining to registration and/or certification.
4. Provide documentation or other evidence requested or required to verify compliance with certification standard.

## **Section II — Organization Registration and Certification Processes**

### **Regional Entity Process**

The NERC organization registration and certification processes are regionally administered. Pursuant with its delegation agreement with NERC, each regional entity is responsible for registering and certifying industry participants within their geographical footprint. Each regional entity must use the following NERC processes.

### **Organization Registration — Entities Required to Register**

All industry participants responsible for one or more of the functions shown must register as a performer of each function through the organization registration process. These entities are defined in the NERC Glossary of Terms used in reliability standards with responsibilities designated by the individual standards.

- Reliability Coordinator
- Transmission Operator
- Balancing Authority
- Planning Authority
- Transmission Planner
- Transmission Service Provider
- Transmission Owner
- Resource Planner
- Distribution Provider
- Generator Owner
- Generator Operator
- Load-Serving Entity
- Purchasing-Selling Entity
- Compliance Monitor

### **Organization Certification**

According to NERC organization certification standards, all entities responsible for the reliability coordinator, transmission operator, and/or balancing authority functions shall be certified. The objective is to have the entire NERC footprint covered by certified reliability coordinator, transmission operator, and balancing authority prior to January 1, 2009. As of January 1, 2009, control area will no longer be a recognized term at NERC. Historically, the certification process typically takes three to nine months to complete.

There are two processes through which organization certification will be accomplished.

1. **Transitional Organization Certification Process** — Previously certified control areas electing to become certified as a transmission operator and/or balancing authority function may be able to utilize the transitional organization certification process at the discretion of the regional entity. Existing certified control areas that wish to use the transitional organization certification process must do so prior to the expiry of the control area functional designation on January 1, 2009.

A regional entity's discretion respecting transitional certification extends to whether to allow the use of this process in their regional entity at all, as well as to whether they permit a given applicant to use it. Regional entity's decisions in this regard remain subject to NERC oversight and governance pursuant to approved delegation agreements.

Applicants wishing to use this process must have been certified — or must first complete their certification — as a control area in a manner, including documentation, that clearly and completely demonstrates full compliance with all certification process requirements that the transitional certification process provides relaxation for.

2. **Organization Certification Process** — All non-certified entities or a new entities seeking certification as a reliability coordinator, transmission operator, or balancing authority function must complete the organization certification process for each function.

Existing non-certified entities currently responsible for balancing authority and/or transmission operator functions can be certified as a control area. This control area certification process must be completed prior to December 1, 2006. However, the entity will have to be certified as a functional entity using the “transitional” or “regular” certification process before January 1, 2009.

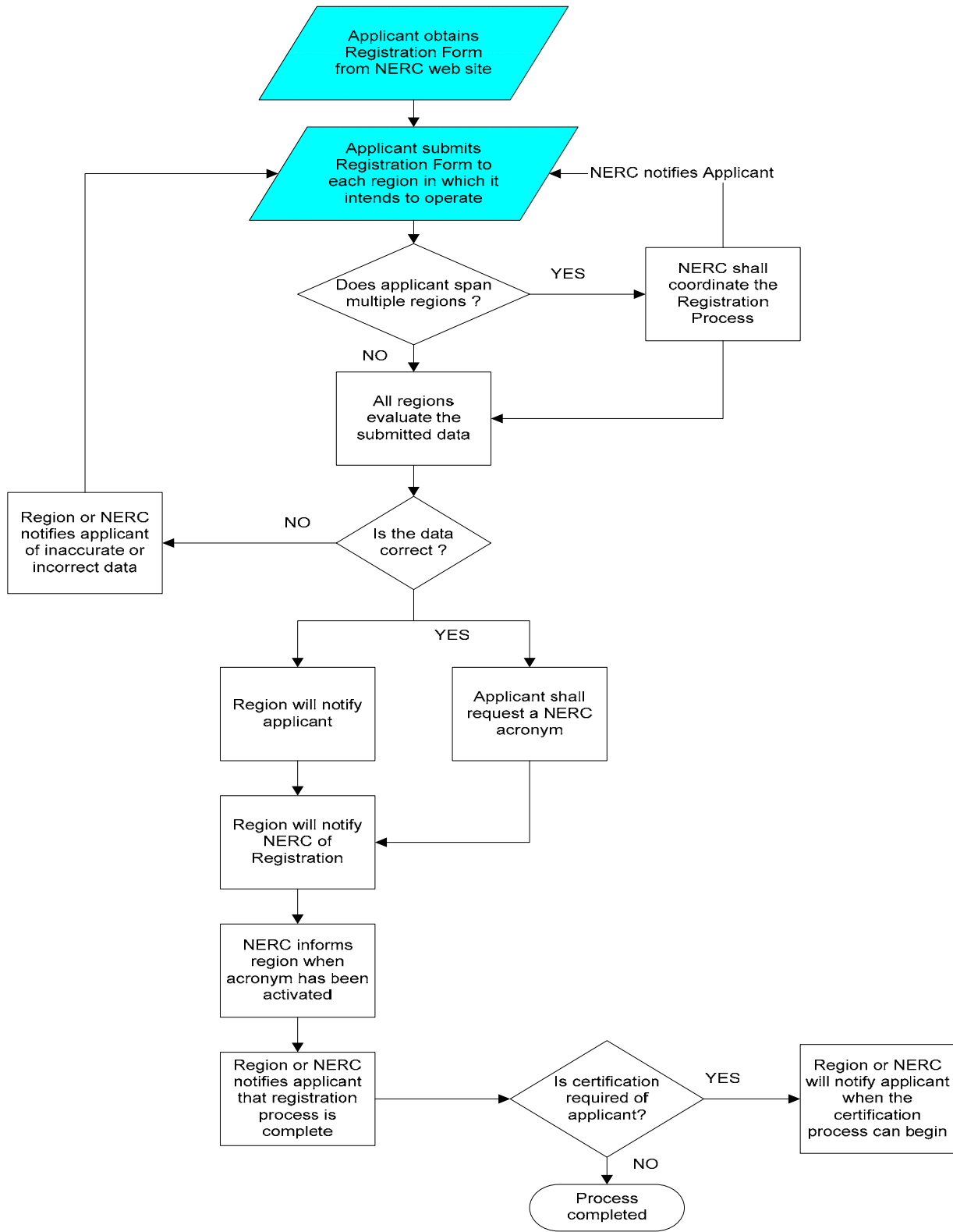
An existing control area or reliability coordinator currently responsible for reliability coordinator, transmission operator, and/or balancing authority functions and electing to:

1. Become certified as those functional model entities will be able to do so either all at the same time or one at a time as long as they become certified in all applicable functions prior to January 1, 2009.
2. Become certified in only one or two of the three can do so at any time but must continue to perform the other function(s) until such time as another entity becomes certified to perform those functions. If no other entity elects to become certified in the uncertified functions, then the control area or reliability coordinator must become certified in those functions prior to January 1, 2009.
3. Not become certified in any of the functions must continue to perform those functions until such time as another entity becomes certified to perform those functions. If no other entity becomes certified to perform any one or all of those functions, then the control area or reliability coordinator must become certified to perform the functions prior to January 1, 2009.

## **Section III — Organization Registration Procedure**

1. The applicant seeking registration shall begin the process by submitting a completed registration application to the compliance and certification manager in each of the regional entities in which it intends to perform that function.
2. For applicants that span multiple regional entities, all affected regional entities will inform NERC of the request. In all such cases, NERC will be the coordinator and will notify the applicant of NERC's role.
3. Entities that have NERC acronyms shall use them on the form.
  - a. If an entity does not have an acronym, NERC may initiate assignment of one or the entity can request one.
  - b. An entity responsible for more than one function can use a single acronym or can use separate acronyms for each function it performs.
  - c. Acronyms must be activated before they can be used.
  - d. NERC activates acronyms.
  - e. If/as applicable, acronyms will not be activated until the registration process is complete.
  - f. Entities requiring certification will not have their acronym(s) activated until they have been certified.
4. All affected regional entities shall evaluate the submitted information and determine if any information is incomplete.
5. The regional entity region or NERC shall inform the applicant of any inaccurate or incomplete data.
6. When the data is complete and accurate the regional entity region or NERC shall notify the applicant.
7. The regional entity region shall inform NERC that the registration process is complete.
8. If/as applicable, NERC informs the regional entity when the acronym has been activated.
9. The regional entity or NERC notifies the applicant that the registration process is complete.
10. For applicants that are required to be certified, the regional entity or NERC shall notify the applicant when the certification process can begin.

Registration Flow Diagram





## **Transitional Certification**

(only available until January 1, 2009)

The transitional organization certification process may apply, at the discretion of the regional entity, to a control area previously certified to perform as a control area, electing to be certified as a balancing authority and/or transmission operator:

1. The entity will have to complete the appropriate certification self assessment questionnaire.
2. The entity will have to self-assess its ability to perform any additional requirements that they are not currently certified to perform.
3. The entity by affidavit (a document signed by an officer of the company) will have to verify that they are capable of continuing to perform the requirements of the balancing authority or transmission operator that they are currently responsible for.
4. The Certification Review Team shall be formed. That team, using the above documents, shall determine whether the applicant meets NERC's organization certification requirements. This may be done without a site visit; however, the review team has at its disposal all of the tools accorded any review team (additional questionnaire, site visit, neighboring entity questionnaire, previous compliance issues, results of previous readiness audits, etc.).
  - a. An on-site visit is required of all entities that have not previously undergone a site visit for control area certification or readiness audit.

## Section IV — Transitional Certification Procedure

### Certification Process

1. Applicants seeking certification:
  - a. In a single NERC regional entity shall initiate the certification process by completing a certification application and sending it to the compliance and certification manager in the regional entity. The regional entity in which the applicant plans to perform will conduct the certification process.
  - b. In multiple regional entities shall initiate the certification process by completing a certification application and sending it to the compliance and certification manager in each affected regional entity, each of which will inform NERC. NERC will be the coordinator and will notify the applicant of NERC's role. NERC shall coordinate the certification process among the affected regional entities.
2. Upon receipt, the application will be assessed for completeness and accuracy. When the application is deemed complete and accurate it will be accepted; at that time the applicant and the regional entity or NERC shall agree to a timeline, including specific milestones for the certification process. The applicant and the regional entity or NERC shall complete the NERC organization certification process within nine months of the date of acceptance of the application unless agreed to differently by all parties involved in the process.
3. The regional entity or NERC shall require the entity to complete the transitional certification self-assessment of its ability to perform any additional requirements that they are not currently certified to perform. The regional entity or NERC shall provide all participants with a copy of expectations regarding confidentiality and retention of all data reporting, completed questionnaires and forms, reports, and recommendations associated with the documentation it provides and receives.
4. The regional entity or NERC shall require the entity to complete an affidavit (a document signed by an officer of the company) verifying capability of continuing to perform the requirements of the organization certification standard that they are currently responsible for.
5. The regional entity or NERC shall assemble a Certification Review Team charged with the responsibility of determining if the applicant meets NERC's organization certification requirements. The review team members shall subject themselves to NERC confidentiality agreements for any data or information made available to them through the certification review process.
  - a. If the applicant objects to any member of the certification team, the applicant must make that known, in writing, to the regional entity or NERC listing the reasons for the objection.
  - b. The regional entity will either replace the team member or respond with written justification for keeping the member on the team.
6. The review team shall consist of a minimum of three individuals including a regional entity representative and a NERC representative at NERC's option. The selected individuals shall represent at least three of the categories listed below:

- a. Balancing Authority
- b. Reliability Coordinator
- c. Transmission Operator
- d. Transmission Owner
- e. Transmission Service Provider
- f. Transmission Planner
- g. Planning Authority
- h. Generation Operator
- i. Generation Owner
- j. Distribution Provider
- k. Representative from NERC staff
- l. Representative from regional entity staff
- m. Representative from another regional entity
- n. Representative from an RTO or ISO, when applicable

The balancing authority review team shall minimally consist of a balancing authority and its reliability coordinator; the reliability coordinator review team shall minimally consist of a reliability coordinator, one of its balancing authorities, and one of its transmission operators; and the transmission operator review team shall minimally consist of a transmission operator and reliability coordinator.

- o. Review team members shall not be employees of or have a direct financial interest in the applicant or any of its affiliates.
  - p. Review processes that involve an entity that is responsible for a function identified in the Reliability Standards across regional entity boundaries shall have a review team that includes at least one representative from each of the affected regional entities. Each individual regional entity shall select its representative to the team.
7. The regional entity or NERC, with agreement of the applicant and all other affected regional entities, may elect to contract an independent review team.
  8. The review team shall identify any deficiencies (to both the applicant and to the regional entities) that must be resolved to the satisfaction of the review team prior to the review team making a recommendation to certify.

9. The review team shall formulate a certification recommendation based on:
  - a. Data collected and validated from the questionnaires, if applicable.
  - b. Data collected during a previous control area or readiness audit.
  - c. Information, demonstrations, and reviews provided as part of a follow-up to correct identified deficiencies.
  
10. The review team shall support its recommendation through a written report. All members of the review team shall have an equal voice in the certification recommendation. This allows for a minority opinion if the review team cannot reach a consensus.
  - a. If the applicant intends to operate in a single NERC regional entity, the review team shall make a recommendation to the regional entity. The regional entity shall approve or disapprove the certification. The regional entity shall notify NERC of the certification decision.
  - b. If the applicant intends to operate in multiple regional entities, the review team shall make a recommendation to those regional entities. All affected regional entities must approve granting of the certification or the certification shall be denied.
  - c. The regional entity or NERC shall verify the regional entity approvals prior to allowing certification. The regional entity shall notify NERC of the certification decision.
  
11. The regional entity or NERC (in consultation with the affected regional entities) may grant a time extension, not to exceed 180 days, to the applicant.
  - a. If the applicant fails to meet the conditions set by the regional entity or NERC, within the granted timeframe, the applicant's request for certification shall be denied.
  - b. If the applicant meets the conditions set by the regional entity(s), within the granted timeframe, the regional entity or NERC (in consultation with the affected regional entities) shall respond to the applicant's notification of completion of requirements within 30 days.
  
12. After the applicant has been awarded certification, the regional entity or NERC shall notify all appropriate entities as to the date that the applicant may begin its operation as a certified entity. The applicant must commence operation within 12 months of certification.
  - a. Failure to begin operation within the 12-month period shall require the applicant to re-apply for certification.
  
13. If the applicant disagrees with the decision, the applicant can initiate the regional entity alternate dispute resolution process within 60 days of the date of the written denial. If the dispute is still unresolved following the regional entity alternate dispute resolution process the applicant can initiate the NERC alternate dispute resolution process. NERC's decision shall be final.

The following additional steps may be included in the transitional certification process:

14. The regional entity or NERC shall provide the questionnaires, a certification schedule, the deadlines for questionnaire submission, and a statement of expectations of the applicant and all of the entities participating in the certification process to those entities that must complete these documents. These questionnaires and other related documents address the applicant's capabilities and actions as they relate to established entity functions and tasks. The regional entity shall distribute questionnaires and other related documents to the following entities as appropriate:
  - a. Applicant (i.e. entity seeking certification).
  - b. All balancing authorities, transmission operator(s), and reliability coordinators in which the applicant intends to operate or interconnect transmission facilities.
  - c. Relevant transmission owners, transmission service providers, planning authorities, generation owners, generation operators, transmission planner, distribution providers, and/or other applicable entities.
15. The review team shall inform the applicant before the on-site visit of any documentation or clarification that is necessary to support the questionnaire.
16. The applicant retains the responsibility for all delegated tasks. The applicant shall identify to the review team all tasks that have been delegated to another entity prior to the on-site visit.
17. The review team shall conduct at least one on-site visit to the applicant's facilities. This may also apply to the facilities of entities responsible for delegated tasks. During the visit, the review team will:
  - a. Review with the applicant the data collected through the questionnaires;
  - b. Interview the operations and management personnel;
  - c. Inspect the facilities and equipment;
  - d. Request a demonstration of all tools identified in the certification standard;
  - e. Review all necessary documents and data including all agreements, processes, and procedures identified in the certification standard;
  - f. Review certification documents and projected system operator work schedules; and
  - g. Review any additional documentation that is needed to support the completed questionnaire or inquiries arising during the site-visit.

## Section V — Organization Certification Procedure

### Requirements — Certification Process

1. Applicants seeking certification:
  - a. In a single NERC regional entity, shall initiate the certification process by completing a certification application and sending it to the regional entity. The regional entity in which the applicant plans to operate will conduct the certification process.
  - b. In multiple regional entities, shall initiate the certification process by completing a certification application and sending it to the compliance and certification manager in each affected regional entity; each affected regional entity will inform NERC of the request. NERC will be the coordinator and will notify the applicant of NERC's role. NERC shall coordinate the review process among the affected regional entities.
2. Upon receipt, the application will be assessed for completeness and accuracy. When the application is deemed complete and accurate it will be accepted; at that time the applicant and regional entity or NERC shall agree to a timeline, including specific milestones for the certification process. The applicant and the regional entity or NERC shall complete the NERC organization certification process within nine months of the date of acceptance of the application unless agreed to differently by all parties involved in the process.
3. The regional entity or NERC shall notify all entities identified below that will provide input into the certification review and provide each with the necessary information regarding the applicant's request for certification, the certification process, and the duties expected from each entity. The regional entity or NERC shall provide all participants with a copy of expectations regarding confidentiality and retention of all data reporting, completed questionnaires and forms, reports, and recommendations associated with the documentation it provides and receives.
4. The regional entity shall notify NERC that the certification process has begun for the entity to enable NERC to carry out their roles and responsibilities.
5. NERC shall implement the required changes to integrate the new entity into the system.
6. The regional entity or NERC shall provide the questionnaires, a certification schedule, the deadlines for questionnaire submission, a statement of expectations of the applicant and all of the entities participating in the certification process to those entities that must complete these documents. These questionnaires and other related documents address the applicant's capabilities and actions as they relate to established entity functions and tasks. The regional entity shall distribute questionnaires and other related documents to the following entities as appropriate:
  - a. Applicant (i.e., entity seeking certification).
  - b. All balancing authorities, transmission operator(s), and reliability coordinators in which the applicant intends to operate or interconnect transmission facilities.
  - c. Relevant transmission owners, transmission service providers, planning authorities, generation owners, generation operators, transmission planner, distribution providers, and/or other applicable entities.

7. The regional entity or NERC shall assemble a Certification Review Team charged with the responsibility of determining if the applicant meets NERC's organization certification requirements. The review team members shall subject themselves to NERC confidentiality agreements for any data or information made available to them through the certification review process.
  - a. If the applicant objects to any member of the certification team, the applicant must make that known, in writing, to the regional entity or NERC listing the reasons for the objection.
  - b. The regional entity will either replace the team member or respond with written justification for keeping the member on the team.
  
8. The review team shall consist of a minimum of three individuals including a regional entity representative and NERC (at NERC's option). The selected individuals shall represent at least three of the categories listed below:
  - a. Balancing Authority
  - b. Reliability Coordinator
  - c. Transmission Operator
  - d. Transmission Owner
  - e. Transmission Service Provider
  - f. Transmission Planner
  - g. Planning Authority
  - h. Generation Operator
  - i. Generation Owner
  - j. Distribution Provider
  - k. Representative from NERC staff
  - l. Representative from regional entity staff
  - m. Representative from another NERC regional entity
  - n. Representative from an RTO or ISO, when applicable

The balancing authority review team shall minimally consist of a balancing authority and its reliability coordinator; the reliability coordinator review team shall minimally consist of a reliability coordinator, one of its balancing authorities, and one of its transmission operators; and the transmission operator review team shall minimally consist of a transmission operator and reliability coordinator.

- o. Review team members shall not be employees of or have a direct financial interest in the applicant or any of its affiliates.
  - p. Review processes that involve an entity that is responsible for a function identified in the reliability standards across regional entity boundaries shall have a review team that includes at least one representative from each of the affected regional entities. Each regional entity, not the regional entity or NERC, shall select its representative to the team.
9. The regional entity or NERC may elect, with agreement of the applicant and all other affected regional entities, to contract an independent review team.
10. The review team shall inform the applicant before the on-site visit of any documentation or clarification that is necessary to support the questionnaire.
11. The applicant retains the responsibility for all delegated tasks. The applicant shall identify to the review team prior to the on-site visit all tasks that have been delegated to another entity.
12. The review team shall conduct at least one on-site visit to the applicant's facilities. This may also apply to the facilities of entities responsible for delegated tasks. During the visit, the review team will:
- a. Review with the applicant the data collected through the questionnaires;
  - b. Interview the operations and management personnel;
  - c. Inspect the facilities and equipment;
  - d. Request a demonstration of all tools identified in the certification standard;
  - e. Review all necessary documents and data including all agreements, processes, and procedures identified in the certification standard;
  - f. Review certification documents and projected system operator work schedules; and
  - g. Review any additional documentation that is needed to support the completed questionnaire or inquiries arising during the site-visit.
13. The review team shall identify any deficiencies (to both the applicant and to the regional entity) that must be resolved to the satisfaction of the review team prior to the review team making a recommendation to certify.
14. The review team shall formulate a certification recommendation based on:
- a. Data collected and validated from the questionnaires;
  - b. Data collected during demonstrations of tools and review of documents observed during on-site visit(s); and
  - c. Information, demonstrations and reviews provided as part of a follow-up to correct identified deficiencies.
15. The review team shall support its recommendation through a written report. All members of the review team shall have an equal voice in the certification recommendation. This allows for a minority opinion if the review team cannot reach a consensus.



- a. If the applicant intends to operate in a single regional entity, the review team shall make a recommendation to the regional entity. The regional entity shall approve or disapprove the certification. The regional entity shall notify NERC of the certification decision.
  - b. If the applicant intends to operate in multiple regional entities, the review team shall make a recommendation to those regional entities. All affected regional entities must approve granting of the certification or the certification is denied.
  - c. The regional entity or NERC shall verify the regional entity approvals prior to allowing certification. The regional entity shall notify NERC of the certification decision.
16. The regional entity or NERC (in consultation with the affected regional entities) may grant a time extension, not to exceed 180 days, to the applicant.
- a. If the applicant fails to meet the conditions set by the regional entity or NERC, within the granted timeframe, the applicant's request for certification shall be denied.

If the applicant meets the conditions set by the regional entity(s), within the granted timeframe, the regional entity or NERC (in consultation with the affected regional entities) shall respond to the applicant's notification of completion of requirements within 30 days.

17. After the applicant has been awarded certification, the regional entity or NERC shall notify all appropriate entities as to the date that the applicant may begin its operation as a certified entity. Applicant must commence operation within 12 months of certification.
- a. Failure to begin operation within the 12-month period shall require the applicant to re-apply for certification.
  - b. If the applicant disagrees with the decision, the applicant can initiate the regional entities Alternate Dispute Resolution process within 60 days of the date of the written denial. If the dispute is still unresolved following the regional entities Alternate Dispute Resolution Process the applicant can initiate the NERC Alternate Dispute Resolution Process. NERC's decision shall be final.

---

## Definitions

<b>Applicant</b>	Industry participant who formally submits an application to register or to become certified to perform one or more functional entity responsibilities.
<b>Certification</b>	The process undertaken by a regional entity to verify that an applicant is capable of responsibilities for tasks associated with a particular function such as control area, balancing authority, transmission operator, or reliability coordinator.
<b>Compliance and Certification Manager</b>	The individual/individuals within the regional entity that is/are responsible for monitoring compliance of entities applicable NERC Reliability Standards.
<b>Days</b>	Days as used in the registration and certification processes are defined as calendar days.
<b>Footprint</b>	The geographical or electric area served by an entity.
<b>Functional Entity</b>	An entity responsible for a function that is required to ensure the reliable operation of the electric grid as identified in the NERC Reliability Standards.
<b>Mapping</b>	The process of determining whether a regional entity's footprint is being served by registered entities.
<b>NERC Acronym</b>	A name given to NERC registered entities that will be used to identify the entity for certain NERC activities. Note: corporate entities may have multiple NERC acronyms to show different corporate involvement in NERC activities.
<b>Non-Certified</b>	An entity that is responsible for a specific function but has not been certified to perform that function by the regional entity.
<b>Regional Entity</b>	
<b>Registration</b>	Process undertaken by a regional entity to identify which entities are responsible for reliability functions within the regional entity's footprint.
<b>Transitional Certification</b>	A process used by regional entities to transition control areas previously certified using the NERC control area certification process to certification as a functional entity.

## Appendix A — NERC Organization Registration and Certification Form

### Sample Registration Form

<b>Organization:</b>		
<b>Corporate Address:</b>		
<b>City:</b>	<b>State:</b>	<b>Zip Code:</b>
<b>Current date and time:</b>		
<b>Last date/time Updated:</b>		

<b>Contact Name:</b>		
<b>Title:</b>		
<b>Phone #:</b>	<b>Fax #:</b>	<b>E-mail:</b>

<b>Currently registered as:</b>	
<input type="checkbox"/> Control Area	Current NERC acronym (If assigned)
<input type="checkbox"/> Transmission Operator	Current NERC acronym (If assigned)
<input type="checkbox"/> Reliability Coordinator	Current NERC acronym (If assigned)
<input type="checkbox"/> Balancing Authority	Current NERC acronym (If assigned)
<input type="checkbox"/> Planning Authority	Current NERC acronym (If assigned)
<input type="checkbox"/> Transmission Planner	Current NERC acronym (If assigned)
<input type="checkbox"/> Transmission Service Provider	Current NERC acronym (If assigned)
<input type="checkbox"/> Transmission Owner	Current NERC acronym (If assigned)
<input type="checkbox"/> Resource Planner	Current NERC acronym (If assigned)
<input type="checkbox"/> Distribution Provider	Current NERC acronym (If assigned)
<input type="checkbox"/> Generator Owner	Current NERC acronym (If assigned)
<input type="checkbox"/> Generator Operator	Current NERC acronym (If assigned)
<input type="checkbox"/> Load Serving Entity	Current NERC acronym (If assigned)
<input type="checkbox"/> Purchasing selling Entity	Current NERC acronym (If assigned)
<input type="checkbox"/> Compliance Monitor	Current NERC acronym (If assigned)
<input type="checkbox"/> None	

<b>Seeking registration as an:</b>	
<input type="checkbox"/> Reliability Coordinator	<input type="checkbox"/> Transmission Operator
<input type="checkbox"/> Balancing Authority	<input type="checkbox"/> Planning Authority
<input type="checkbox"/> Transmission Planner	<input type="checkbox"/> Transmission Service Provider
<input type="checkbox"/> Transmission Owner	<input type="checkbox"/> Resource Planner
<input type="checkbox"/> Distribution Provider	<input type="checkbox"/> Generator Owner
<input type="checkbox"/> Generator Operator	<input type="checkbox"/> Load Serving Entity
<input type="checkbox"/> Purchasing selling Entity	<input type="checkbox"/> Compliance Monitor

<b>Date requested to begin new operation:</b> _____, ____
Regional Entity Affiliation (membership):
If operating across multiple regional entities please list all:
If dates are different for requested operation in individual regional entities please list all:
_____

Comments pertinent to this registration:

*Sample Certification Form*

<b>Organization:</b>		
<b>Corporate Address:</b>		
<b>City:</b>	<b>State:</b>	<b>Zip Code:</b>
<b>Current date and time:</b>		
<b>Date of Registration:</b>		

<b>Contact Name:</b>		
<b>Title:</b>		
<b>Phone #:</b>	<b>Fax #:</b>	<b>E-mail:</b>

<b>Currently Certified as (if applicable):</b>	<b>NERC Acronym</b>
<input type="checkbox"/> Transmission Operator	
<input type="checkbox"/> Reliability Coordinator	
<input type="checkbox"/> Balancing Authority	
<input type="checkbox"/> Control Area	
<input type="checkbox"/> None	

<b>Seeking certification as:</b>	<b>NERC Acronym</b>	<b>Date</b>
<input type="checkbox"/> Transmission Operator		
<input type="checkbox"/> Reliability Coordinator		
<input type="checkbox"/> Balancing Authority		
<input type="checkbox"/> Control Area		

<b>Regional Entity affiliation (membership):</b> If operating across multiple regional entities, list all:
---

Identify the following as applicable:	
If certifying as an RC, adjacent RCs :	(is this box needed ??)
If certifying as a BA, adjacent BAs:	(links below may take)
If certifying as a TOP, adjacent TOPs:	(care of info needs)

**(provide links here to access the questionnaires for specifics on agreements, etc)**

Comments pertinent to this certification:

## **Section VI — NERC Organization Certification Appeals Process**

### **Overview**

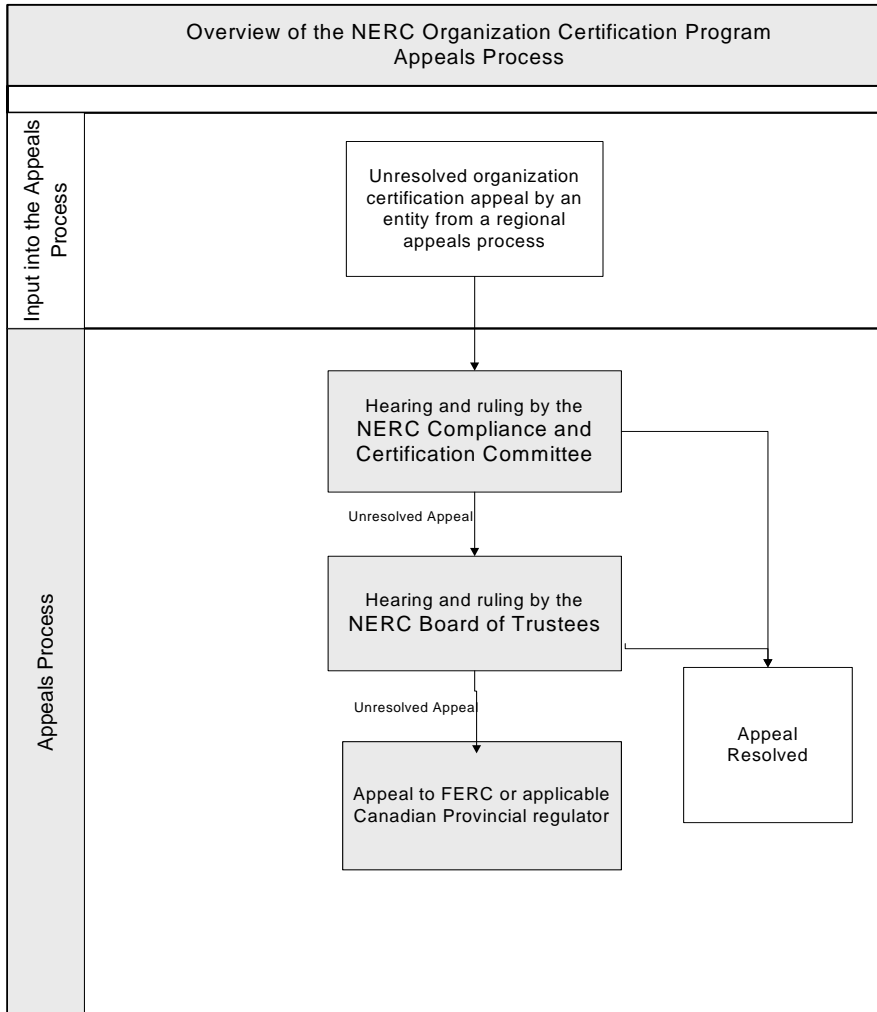
NERC’s mission is to ensure that the bulk power system in North America is reliable, adequate, and secure. Since its formation in 1968, NERC has operated successfully as a voluntary, self-regulatory organization, relying on reciprocity, peer pressure, and the mutual self-interest of all those involved.

The NERC Organization Certification Program provides a key means to fulfill NERC’s mission. In conducting this program, NERC has established documented procedures and will ensure due process to achieve fair and equitable certification of organizations.

### **Scope**

This document describes the process for appealing organization certification findings from the NERC Organization Certification Program. Any entity reviewed under the Organization Certification Program can file an appeal using this process. The top of Figure 1 shows how an entity appeal of an organization certification decision will apply to the NERC appeals process.

Figure 1: Appeals Process Overview



1. Appeal for an Organization Certification Finding

Any functional entity or Regional Entity (RE) can appeal an organization certification decision issued as a result of organization certification actions of the NERC Organization Certification Program. An appeal of certification decision can be initiated after using all steps in a RE appeals process have been exhausted and the entity or RE chooses to appeal further.

2. Requirements and Conditions for Appeals

- a. For all appeals under the NERC Organization Certification Program, the appeals process begins when an entity notifies the NERC vice president–compliance in writing that it wishes to use the NERC appeals process.
  - i) The vice president–compliance is the main contact for all parties in all steps of the appeals process.
  - ii) If an appeal is not filed within fourteen calendar days of the date that the audit report or finding is issued, or the final RE appeals process ruling is made, the finding shall be considered final and unappealable.
- b. Each party in the appeals process shall pay its own expenses for each step in the process.
- c. A stipulation of invoking the appeals process is that the entity requesting the appeal agrees that neither NERC (its members, Board of Trustees, committees, subcommittees, and staff), any person assisting in the appeals process, nor any company employing a person assisting in the appeals process, shall be liable, and they shall be held harmless against the consequences of or any action or inaction or of any agreement reached in resolution of the dispute or any failure to reach agreement as a result of the appeals proceeding. This “hold harmless” clause does not extend to matters constituting gross negligence, intentional misconduct, or a breach of confidentiality.
- d. Parties retain whatever rights they may have to seek further review of a decision in whatever regulatory agency or court may have jurisdiction.

3. Appeals Process — Hearing and Ruling by the Compliance and Certification Committee

- a. Within twenty-eight calendar days of receiving notice from the NERC vice president–compliance that the RE appeals process did not resolve the appeal, the CCC will conduct a hearing where all the parties or representatives of the disputing parties will present the issue in question.
  - i) The CCC must have a quorum present to conduct the hearing.
  - ii) The hearing shall be closed to the public to protect confidential information.
  - iii) CCC members who are interested parties or have an interest in the outcome shall not participate in the hearing.
- b. The CCC will deliberate the issue in a one-day session, take a vote on how to resolve the appeal, and recommend a resolution based on a majority vote, all according to established CCC procedures.
  - i) Should both parties accept the solution, the matter will be considered resolved and the process terminated.

- ii) If either of the parties wishes to pursue the appeal further, or if the CCC process cannot be completed in accordance with the timeline of the appeals process outlined in this document, the NERC vice president–compliance shall be notified within seven calendar days.

The NERC vice president–compliance will forward the appeal to the NERC board of trustees within seven calendar days of being notified for resolution.

4. Appeals Process — Hearing and Ruling by the NERC Board of Trustees

- a. The NERC board will be asked to resolve a dispute related to the NERC Organization Certification Program if and only if the prior steps outlined in this procedure have failed to render an acceptable solution.
- b. At the next regularly scheduled NERC board meeting, or at a special meeting if the board determines it is necessary, the chairman of the CCC will present to the board a summary of the dispute and the actions taken in an attempt to resolve it.
  - i) Each party will then present their side of the dispute.
  - ii) The NERC board will then decide the dispute.
- c. A record of the appeals process shall be maintained and available upon request. Confidentiality of the record of the appeal will be based on the FERC guidelines for the treatment of critical infrastructure information. Entities may request information considered competitive or market sensitive information be withheld.

5. General Requirement

- a. Parties are entitled to a fair and impartial appeals process. No one with a direct interest in a dispute may participate in the appeals process except as a party or witness.

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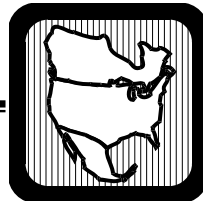


# System Operator Certification

# Program Manual

Approved by the Personnel Certification Governance Committee  
February 8, 2006

Pending endorsement by the NERC Board of Trustees



North American Electric Reliability Council  
February 2006

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## **Executive Summary**

The System Operator Certification Program provides the framework for the examinations used to obtain initial certification in one of four NERC credentials: Transmission Operator, Balancing and Interchange Operator, Balancing, Interchange and Transmission Operator, and Reliability Operator. A system operator credential is a personal credential issued to a person for successfully passing a NERC system operator certification exam. The credential is maintained by accumulating a specified number of continuing education hours within a specified period of time. The program will allow system operators to maintain their credential through continuing education rather than to recertify by retaking an examination.

The NERC Personnel Certification Governance Committee (PCGC) is the governing body that establishes the policies, sets fees, and monitors the performance of the System Operator Certification Program. As program administrator, NERC maintains databases, records, and applications, collects fees, maintains contracts with vendors, and provides reports on system operator certification related activities. The PCGC is responsible for ensuring the program is not-for-profit and financially sound, and annually reviews the program to ensure that it is adequately funded.

## Section I — Certification Examinations

### Overview

The System Operator Certification Program awards certification credentials to those individuals who demonstrate that they have attained sufficient knowledge relating to NERC reliability standards as well as the basic principles of bulk power system operations by passing one of four specialty examinations. A certificate is issued to a candidate who successfully completes an examination. Certificates issued prior to the implementation of the new continuing education hours requirement will be valid for five years. Certificates issued after the implementation of this requirement will be valid for three years.

The members of the Examination Working Group (EWG) represent each of the specialty areas tested in the examinations. The EWG develops the examinations under the guidance of a psychometric consultant. The examinations are based on content outlines that were developed through a job analysis. Prior to being used in the scoring process, each question is ‘piloted’ (not scored) for one full examination cycle (eighteen months), and the performance of each question is continually tracked. The direct involvement of system operators, supervisors, and trainers in the examination development process will remain a primary requirement of future NERC system operator certification examinations.

### Earning a Credential

#### Examinations

There are four specialty examinations: Reliability Operator, Balancing and Interchange Operator, Transmission Operator, and Balancing, Interchange, and Transmission Operator. Each of the examinations has its own content outline that can be accessed from the Program’s Web page. The specifics of the individual examinations can be obtained from the table below. The individual content outlines for each of the specialty examinations can be obtained by clicking on the name of the exam.

Examination Title	Total Questions	Scored Questions	Passing Score (# of answers correct)	Passing Score (% of answers correct)
Reliability Operator Certification Examination	150	125	93	74.4
Balancing, Interchange, and Transmission Operator Certification Examination	150	125	93	74.4
Transmission Operator Certification Examination	125	100	76	76
Balancing and Interchange Operator Certification Examination	125	100	76	76

## Applying for Certification Examinations

1. You must first establish a NERC.net user account. Once you are registered, you can access the on-line application form.
  - a. If you do not have a NERC.net user account, please [click here](https://soc.nerc.net/registration/default.aspx) (<https://soc.nerc.net/registration/default.aspx>) to set up your free account.
2. If you already have a NERC.net user account, please [click here](https://soc.nerc.net/default.aspx) (<https://soc.nerc.net/default.aspx>) to sign-in to your NERC.net user account to access the on-line examination application form.
  - a. If you have forgotten your user name or password, contact the NERC office at phone number (609) 452-8060 (Mon–Fri, 8:00 a.m.–4:00 p.m. Eastern).
3. Select *Exam Application Form*
4. Select the examination you wish to take then click *SUBMIT*
5. You may submit your payment either by selecting credit card (VISA or MasterCard only) or invoice for check payments. A copy of the invoice and check or money order must be mailed to NERC to complete your examination application process.

North American Electric Reliability Council  
System Operator Certification Program  
116-390 Village Boulevard  
Princeton, New Jersey 08540-5731

Applications are accepted year round. Allow two weeks for the processing of your application and receipt of notification that you are approved to take the examination.

An application is considered complete and processed only when all required information is provided and fees are received. After the application is processed, the Authorization-to-Test (ATT) letter containing the assigned ATT number is sent to each eligible candidate by e-mail followed by regular mail.

### Eligibility Period

Eligibility to take the examination remains in effect for one year from the date the ATT number is issued. Candidates are encouraged to schedule an appointment to sit for the examination promptly. If a candidate fails to schedule and take the examination during the one-year eligibility period, the candidate shall forfeit all payments made to NERC. Candidates who fail to take the examination within the one-year eligibility must submit a new application and pay the full fee to be considered for eligibility again.

**Fees**

Fee Schedule**		
Schedule	Member*	Non-Member
Application to test	\$350	\$850
Application to retest	\$350	\$850
Application to withdraw	\$50	\$50
Bad check/credit application	\$25	\$50

\*Members include employees of NERC and the Regional Councils and their member organizations, and governmental representatives.

\*\*All funds shall be payable in U.S. dollars.

**Before scheduling an examination, please do the following:**

- Review all parts of this Administrative Manual.
- Complete and submit the application to NERC, along with the appropriate fee.
- Receive an ATT letter containing the assigned ATT number by e-mail and regular mail from NERC declaring that you are eligible to take the examination. The letter will also provide instructions on how you may arrange the location, date, and time of your examination. The ATT number will be needed when you contact Prometric to schedule your test appointment.

**Scheduling an Examination**

NERC will send you an ATT letter by e-mail and regular mail with instructions about the identification items to bring with you on the day of the examination. To select your examination location, date, and time go to the Prometric Web site at <http://www.prometric.com>. All attempts should be made to schedule your examination as soon as possible because testing center appointments are in high demand by other professions. Waiting to schedule your appointment may significantly limit the locations, dates, and times available. Examinations may be administered on any Monday through Saturday. Examinations may be taken on any day that accommodates your schedule and where and when examination space is available.

During the scheduling process, you will be required to confirm your ATT number and your first and last name. You will be advised of available testing locations, dates, and times.

*Note: When you schedule your test date, you will receive a confirmation number from Prometric. Please retain this number, as it will be useful should you have to use Prometric’s automated cancellation system or if there is a conflict with the test center appointment. Prometric will not mail you a confirmation notice.*

## Examination Content Outline

The computer-based examination consists of objective, multiple-choice questions. The questions are based on the published [Content Outline](#) for each of the NERC system operator certification examinations.

## Day of the Examination

**Time at Testing Center** — Plan to arrive at the testing center at least thirty minutes early to sign in. You should allocate at least four hours to accommodate the total time you might be at the testing center. This includes:

Examination Time Allocation	
Examination Stages	Time Allocation
Administration & Review of Candidate Identification	30 minutes
Computer-Based Tutorial	15 minutes
Examination	2 hours & 45 minutes
Post-Examination Survey	15 minutes
<b>Total Time to be Allocated</b>	<b>3 hours &amp; 45 minutes</b>

**Computer Familiarization** — A fifteen-minute tutorial on operating instructions for the computer-based examination will be provided before the start of each examination. The tutorial is self-explanatory, and no prior computer knowledge is needed. You may bypass this feature if you wish (not recommended).

Computer-based testing allows you to skip questions, mark, and return to them at a later time. During the examination, you may change your answer to any question. A clock is on the screen at all times indicating the time remaining. Before exiting the examination, the computer will indicate any question(s) you have marked for review or those that remain unanswered.

**Post-Examination Survey** — At the completion of the examination, you will be invited to complete a brief questionnaire on your reactions to the examination experience and the quality of the testing center staff and services. *This is also your opportunity to comment on the content of the examination and to challenge any particular examination questions or answers.*

**Comments** — Comments on the examination process or questions will be collected in the post-examination survey. All comments will be forwarded to NERC.

## Testing Center Requirements

**Required Methods of Identification** — You will be required to show two forms of identification before being admitted to the examination. You will be required to show at least one primary form of identification and either another primary or a secondary form of identification.

- Primary identification — Primary identification is a government-issued form of identification and must have **both** your picture **and** your signature on it. Some examples of primary identification are: a driver's license (if it has both your picture and your signature), a passport, or a military ID.
- Secondary identification — Secondary identification must have **either** your picture **or** your signature **or** both. Acceptable forms of secondary ID are: a second government-issued ID as above, or an employment ID, or a credit card or debit card.

*Identification(s) that have been altered or damaged will not be accepted at the Prometric Test Center. If there is any discrepancy between the name on the identification presented to the test center staff and the NERC registration, the candidate will not be admitted to test and will be marked as a no-show. All no-shows forfeit all funds paid – no refunds are granted to no-shows.*

## Testing Center Regulations

- Candidates who arrive late for the examination might not be seated for the examination, depending on the criteria established by that testing center. Late arrivals that are not permitted to take the examination will be considered a no-show and must reapply and pay the full test fee to take the examination.
- No reference materials, calculators, or recording equipment may be taken into the examination. Candidates will be provided a keyed locker to store personal items while taking the examination.
- No test materials, documents, notes, or scratch paper of any sort may be taken from the examination.
- Visitors are not permitted during the examination.
- Testing center staff is instructed to answer questions about testing procedures only. They cannot respond to inquiries regarding the examination's content.
- During the examination, candidates may use the rest rooms for a biological break; however, the examination clock will continue running during such times.
- Candidates may not leave the testing center until they have finished the examination.
- Smoking is not permitted in any testing center.
- Any candidate giving or receiving assistance, or making a disturbance, will be required to turn in their examination materials, exit the examination room, and leave the testing center. Your test will be scored whether you have completed it or not. The Disciplinary Action Procedure will be initiated upon notification by Prometric to NERC that such activity had occurred.
- Any instances of cheating, or attempts to impersonate another candidate, will be dealt with through the Disciplinary Action Procedure.



## **Cancellations and No-shows**

You may cancel and reschedule an examination appointment either by calling Prometric at the toll free number listed in your ATT letter or through their Web site (<http://www.prometric.com>). Your request to cancel must be no later than noon, local test center time, two days (Monday–Saturday excluding local holidays) before the examination date. You may reschedule the examination date within your period of eligibility without paying an additional fee. If you are late in canceling your examination appointment, do not appear for it, or arrive late, you will be considered a no-show. All no-shows will have to reapply to take the examination and pay the full test fee. Refunds will not be issued to no-shows.

## **Minimum Time Between Examinations**

Candidates who fail the examination must wait forty-two days from the date of the failed examination to retest. Candidates who pass one of the NERC system operator certification examinations may take the examination thirty-six months after the date they were last certified (this only applies to those certificates valid for five years that were issued prior to the implementation of continuing education hours as a means of credential maintenance).

## **Special Accommodations/Disabilities**

Allowance will be made for all documented requests for special testing conditions. Applicants must notify NERC by [e-mail](#) or telephone. The certification coordinator will contact the applicant with further instructions. Disability requests must be supported by a letter (original copy) from a recognized health care provider and be signed by a physician or psychologist. All other requests must be similarly supported. NERC will review each request and provide appropriate accommodations. The decision will be included in the notice of eligibility/registration approval sent to the applicant.

*Note: All testing centers are in compliance with the regulations governing the Americans with Disabilities Act (ADA).*

## **Withdrawal from Examination Process**

As described in the *Eligibility Period* section of this Administrative Manual, the eligibility period is one year from the date the ATT number is issued. If a candidate wishes to withdraw from the process within the stated period for any reason, they must complete the Candidate Withdrawal request on the system operator certification Web site on or before the last eligibility day. Candidates who submit the request within the time period will be reimbursed for the fees submitted to NERC less the Withdrawal Fee in effect at the time of the application. Failure to properly withdraw will result in the candidate forfeiting all submitted fees.

If you have already scheduled an appointment with Prometric to take the exam, you must first cancel that Prometric appointment or you will be charged a no-show fee.

### **To access the Exam Withdrawal**

On the [System Operator Certification Program](#) homepage, logon to your NERC.net account:

- Enter [User name](#) and [Password](#)
- Click on [Logon](#)
- Click on [Exam Withdrawal](#)
- Select the exam you are registered to take and from which you wish to withdraw, then click on [Submit](#)

### **Examination Change Request**

If a candidate wishes to change the examination (i.e., from BI to TO, or from RC to BIT, etc.) that they are registered to take, they must use the Program's Web site. An examination change request will not change the candidate's eligibility period. The eligibility period will remain valid for one year from the date that the original ATT number was issued. This change request must be submitted at least thirty days prior to the expiration of the candidate's eligibility period.

### **To access the Examination Change**

On the [System Operator Certification Program](#) homepage, logon to your NERC.net account:

- Enter [User Name](#) and [Password](#)
- Click on [Logon](#)
- Click on [Exam Change](#)
- Select the exam for which you are authorized then click on [Submit](#)
- Select the desired exam from the drop-down list, then click on [Submit](#)

You will be issued a new ATT number with the original expiration date. After receiving your new ATT you must schedule/reschedule an appointment with Prometric to take the exam.

### **Results and Awarding of Certificates**

Candidates can view pass/fail results on the computer screen when the examination is terminated. Before exiting the Prometric Testing Center, a copy of this display will be provided. This is an unofficial summary of the examination.

After grading and analysis of the examination results, NERC will mail an official summary. This will take about ten to twelve weeks. The official summary will include the grade achieved and the percentage of correctly answered questions in each Content Outline category.

Candidates who pass the examination will receive the appropriate NERC-certified system operator certificate based on the examination taken and signed by the President of NERC. The date on the certificate will be the day the candidate took the examination.

## **Confirmation of Credential to Third Parties**

NERC will confirm to an employer that an individual holds a valid NERC system operator certificate (including releasing the certificate number and the issuance date) in response to a written request, on the employer's letterhead (or e-mail), providing the name of the individual. NERC will release the certificate numbers and issuance dates for individuals holding a current NERC system operator certificate to the Regional Compliance staff or designated agents of those Regions in which an individual's employer operates in response to a written request, submitted on organization letterhead (or e-mail), that provides the names of the individuals for whom information is sought. No further information will be provided.

NERC will confirm to an employment search firm, or a potential employer, whether an individual holds a valid NERC system operator certificate (including releasing the certificate number and the issuance date) if the search firm has a release from the individual. No further information will be provided.

## Section II — Credential Maintenance

**Effective Date: October 1, 2006**

### Overview

The System Operator Certification Program incorporates a requirement to use continuing education hours (CEH) to maintain a credential that is valid for three years. Successfully passing an examination earns a credential and a certificate that is valid for three years. Accumulation of the proper number and type of CEH from NERC-Approved Learning Activities within that three-year period maintains the validity of that credential for the next three years. A new certificate is issued indicating the new expiration date.

The program provides that:

1. System operators seeking to obtain a credential will have to pass an examination to earn a credential.
2. A certificate, valid for three years, will be issued to successful candidates.
3. A certified system operator must accumulate a minimum number of CEH, in specific training topics, before their certificate expires to maintain their credential. The minimum number of CEH is based on each credential:
  - a. 200 CEH for Reliability Operator
  - b. 160 CEH for Balancing, Interchange, and Transmission Operator
  - c. 140 CEH for Balancing and Interchange Operator
  - d. 140 CEH for Transmission Operator
4. A minimum of 30 CEH must focus on content and/or implementation of NERC Standards.
5. A minimum of 30 CEH must be in simulations (i.e., table-top exercises, training simulators, emergency drills, practice emergency procedures, restoration, black start, etc.).
6. CEH can concurrently count for both NERC Standards and simulations but will only be counted once for the total CEH requirement.
  - a. For example: A one-hour simulation learning activity that focuses on NERC Standards can count towards the requirements for both NERC Standards and simulation. However, the credential holder will only be awarded a total of one CEH toward the total CEH requirement. In other words, the CEH will not be double counted.
7. Retaking the examination is not an option for credential maintenance.
8. If a certified system operator does not accumulate enough CEH to maintain their current credential prior to the certificate expiration date, their credential will be suspended for a maximum of one year. At the end of the suspension period, their credential will be revoked.
9. If, prior to the end of the one-year suspension, the certified system operator accumulates the proper number and type of CEH, their credential will be reinstated with the original expiration date (three years after the previous expiration date).
10. A system operator with a revoked credential will have to pass an examination to become certified.

## When to Start Accumulating CEH

CEH's earned (date of learning activity) in the six months prior to the implementation date will be recognized if they are earned from an approved learning activity that meets the certification program requirements. Each learning activity will have to be approved for use for credential maintenance prior to the CEH's being issued.

## Specifics of the Credential Maintenance Program

Certified system operators are required to accumulate CEH through the NERC CE Program in recognized training topics for credential maintenance. See *Appendix A* for the list of recognized training topics. Described below are the requirements for each of the four credentials:

### Transmission Operator Certification

To maintain a valid Transmission Operator credential, system operators must earn **140 CEH** within the 3-year period preceding the expiration date of their certificate.

The 140 CEH must include:

- A minimum of 30 CEH must focus on content and/or implementation of NERC Standards.
- A minimum of 30 CEH must utilize simulations (i.e., table-top exercises, dispatcher/operator training simulators, emergency drills, or practice emergency procedures, restoration, blackstart or other reliability-based scenarios).

### Balancing and Interchange Operator Certification

To maintain a valid Balancing and Interchange Operator credential, system operators must earn **140 CEH** within the 3-year period preceding the expiration date of their certificate.

The 140 CEH must include:

- A minimum of 30 CEH must focus on content and/or implementation of NERC Standards.
- A minimum of 30 CEH must utilize simulations (i.e., table-top exercises, dispatcher/operator training simulators, emergency drills, or practice emergency procedures, restoration, blackstart or other reliability-based scenarios).

### Balancing, Interchange, and Transmission Operator Certification

To maintain a valid Balancing, Interchange, and Transmission Operator credential, system operators must earn **160 CEH** within the 3-year period preceding the expiration date of their certificate.

The 160 CEH must include:

- A minimum of 30 CEH must focus on content and/or implementation of NERC Standards.
- A minimum of 30 CEH must utilize simulations (i.e., table-top exercises, dispatcher/operator training simulators, emergency drills, or practice emergency procedures, restoration, blackstart or other reliability-based scenarios).

### **Reliability Operator Certification**

To maintain a valid Reliability Operator credential, system operators must earn **200 CEH** within the three-year period preceding the expiration date of their certificate.

The 200 CEH must include:

- A minimum of 30 CEH must focus on content and/or implementation of NERC Standards.
- A minimum of 30 CEH must utilize simulations (i.e., table-top exercises, dispatcher/operator training simulators, emergency drills, or practice emergency procedures, restoration, blackstart or other reliability-based scenarios).

### **Certificate**

System operators that have: 1) completed the credential maintenance application, 2) satisfied the CEH requirements, and 3) paid the required fee will be issued a certificate valid for three years.

### **Deficits of CE Hours for Credential Holders**

The credential of a certified system operator who does not accumulate the required number and balance of CEH within the three-year period will be suspended. A system operator with a suspended certificate cannot perform any task that requires an operator to be NERC-certified. The system operator with a suspended credential will have up to twelve months to acquire the necessary CEH.

During the time of suspension, the original anniversary date will be maintained. Therefore, should the system operator accumulate the required number of CEH within the twelve-month suspension period, they will be issued a certificate that will be valid for three years from the previous expiration date. The system operator will be required to accumulate the required number of CEH prior to the current expiration date.

At the end of the twelve-month suspension period, if the system operator has not accumulated the required number of CEH, the credential will be revoked and all CEH earned will be forfeited. After a credential is revoked, the system operator will be required to pass an examination to become certified.

For example, a system operator whose credential expires on July 31, 2009 does not accumulate the required number of hours prior to that date:

1. The credential will be suspended on August 1, 2009.
2. If the system operator then accumulates and submits the required number of hours by March 1, 2010, the credential will be reinstated on March 1, 2010, and will be valid until July 31, 2012.
3. The system operator will have to accumulate the required number of hours prior to July 31, 2012 or the credential will be suspended again.
4. CEH previously used to maintain the credential cannot be reused for credential maintenance.
5. A record of the suspension between August 1, 2009 and March 1, 2010 will be maintained.

## **Carry-Over Hours**

For all credentials, up to 30 CEH accumulated in the six months prior to the certificate expiration date and not used for credential maintenance may be carried over to the next three-year period.

CEH will be allocated on a first-in, first-out basis. In other words, CEH from a learning activity occurring first according to the calendar will be used to satisfy the CEH requirement first and continuing sequentially by the date of the learning activities.

## **Reporting of CEH Earned by Certified System Operators**

Normally, the Providers will make the submittals of CEH electronically into the NERC system operator certification database. However, should some conflict occur, the certified system operator must be able to submit proof of having acquired the necessary CEH from the CE Program's approved learning activities.

System operators will be able to track their status/progress towards maintaining their credential through the NERC system operator certification Web site. Certified system operators should review their CEH records at least 90 days before their certificate expiration date to allow sufficient time to acquire CEH prior to the system operator's certificate expiration date should there be a deficit.

If a Provider does not submit the CEH, the certified system operator must submit proof of sufficient CEH to the NERC Manager–Personnel Certification no less than 30 days before the system operator's certificate expiration date. NERC staff may be able to process/resolve discrepancies in credential holder CEH records in less than 30 days; however, submissions received at NERC within the 30-day window may not be credited to the system operator's account in time to prevent the credential from being suspended. Suspended credentials based on incomplete data will be reinstated retroactively once proof of completion is verified.

For system operators who meet the CEH requirements, and upon receipt of an application and necessary fees, NERC will issue a new certificate with an expiration date three years from the previous expiration date (a new certificate will be mailed to the address on record).

## **Application for Credential Maintenance**

### **Procedure for applying for credential maintenance**

Application procedure will be completed after the software is developed.

## Hardship Clause

It is understood that, due to unforeseen events and extenuating circumstances, a certified system operator may be unable to accumulate the necessary CEH in the time frame required by the Program to maintain the credential. In such an event, an individual must submit a written request containing a thorough explanation of the circumstance and supporting information to:

Manager–Personnel Certification  
NERC  
116-390 Village Boulevard  
Princeton, New Jersey 08540

The PCGC retains the right to invoke this Hardship Clause and deviate from the Program rules, as it deems appropriate, to address such events or circumstances. Examples of extenuating circumstances would include, but not limited to, extended military service, extended illness of the system operator or within the system operator’s immediate family, or system operator temporary disability that results in an extended period of time away from work.

## Changing Certification Levels

Certified system operators that want to transition to a lower credential can do so. Many system operators hold a Reliability Operator credential but are not working in a reliability operator capacity. Those certified system operators could easily transition to a credential that more closely matches the work they perform without taking an examination. However, system operators currently holding a Transmission Operator or Balancing and Interchange Operator credential will have to pass an examination to move to a higher credential such as the combined Balancing, Interchange, and Transmission Operator credential or the Reliability Operator credential.

A certified system operator can change the type of their credential by indicating their desire on their credential maintenance application. A system operator has the following options:

*To change a credential from:*

- Balancing and Interchange Operator to any other NERC credential: the system operator must pass the examination for that credential.
- Transmission Operator to any other NERC credential: the system operator must pass the examination for that credential.
- Balancing, Interchange, and Transmission Operator to Reliability Operator: the system operator must pass the examination for that credential.
- Reliability Operator to any other NERC credential: the system operator must submit the proper number and type of hours for the new credential.
- Balancing, Interchange, and Transmission Operator to Transmission Operator or Balancing and Interchange Operator: the system operator must submit proper number and type of hours for the new credential.



## **Transition Plan — 5-year Program to 3-year Program**

A certified system operator whose certificate expires during the first three years after implementation of this Program has the option to either accumulate the required number of CEH according to the rules stated previously or passes the examination for the desired credential. Certified system operators who accumulate the required number and balance of CEH will receive a certificate that will be valid for three years from the expiration date on their current certificate. System operators who pass an examination will receive a certificate valid for three years from the date they pass the examination.

Certified system operators whose certificate expires after the third anniversary of the implementation of this Program, must accumulate the required number CEH prior to the expiration date of their certificate regardless of the issuance date of their certificate.

## Section III — Program Rules

### Rules for NERC-Certified System Operator

#### Recognized Learning Activities

CEH will be recognized for credential maintenance only for training topics/learning activities listed in *Appendix A* and where Providers have complied with the CE Program rules.

#### Provider Access to Database

Providers will be able to access the database to upload certified system operator CEH activity. The process for doing this will be determined after the database is developed.

#### System Operator Access to Database

Certified system operators will be able to access the database to track their CEH activity. The process for doing this will be determined after the database is developed.

#### Retain Documentation

The certified system operator is responsible for retaining appropriate documentation for proof of credential maintenance. Documentation includes:

- Name and contact information of the Provider
- Title and identification number of the learning activity and description of its content
- Date(s) of the learning activity
- Location (if applicable)
- Number and type of CEH
- System Operator's NERC certificate number

#### Learning Activity Credit Only Once Per Year

CEH for a particular course or learning activity will not be recognized for credential maintenance more than once a year based on the credential anniversary. (i.e., during the twelve-month period preceding the system operator's credential anniversary)

*Exception: CEH for courses dealing with emergency operations will be recognized no more than two times per year based on the credential anniversary. (ie: during the 12-month period preceding the system operator's credential anniversary)*

#### Learning Activity Approved Status Revoked after CEH Granted

CEH granted for a course or learning activity that had been approved for credential maintenance will still be recognized if, subsequent to the system operator attending the course or learning activity, the approved status is revoked.

**Instructor Credits**

For those instructors who are also certified system operators, 1.0 CEH for each CEH of a learning activity delivered will be recognized towards the instructor’s system operator credential maintenance. CEH for a particular course or learning activity will not be recognized for credential maintenance more than once a year based on the credential anniversary. (i.e., during the twelve-month period preceding the system operator’s credential anniversary)

*Exception: CEH for courses dealing with emergency operations will be recognized no more than two times per year based on the credential anniversary. (i.e., during the twelve-month period preceding the system operator’s credential anniversary)*

**Treatment of Disputes Between Certified System Operator and Providers**

Disputes between a Provider and a certified system operator must be resolved between the Provider and the certified system operator. NERC will not become involved in resolving the dispute. Additionally, it is the obligation of the certified system operator to periodically review their CEH records in the NERC system operator certification database and to maintain their own training records to provide proof that CEH requirements have been achieved.

**Fees**

Fee Schedule**		
Schedule	Member*	Non-Member
Application to test	\$350	\$850
Application to maintain or change credential using CEH	\$350	\$850
Application to retest	\$350	\$850
Application to withdraw	\$50	\$50
Bad check/credit application	\$25	\$50

\*Members include employees of NERC and the Regional Councils and their member organizations, and governmental representatives.

\*\*All funds must be payable in U.S. dollars.

The Program must be financially independent as well as not-for-profit. The on-going expenses to develop and maintain the examinations and the management and administrative costs associated with both the examination process and credential maintenance necessitate these fees. These fees will be periodically reviewed and adjusted accordingly.

## Section IV — Dispute Resolution

### 1. Applicability

Any dispute arising under the NERC agreement establishing a *NERC System Operator Certification Program* or from the establishment of any NERC rules, policies, or procedures dealing with any segment of the certification process shall be subject to the NERC System Operator Certification Dispute Resolution Process (hereafter called the “Process”). The Process is for the use of persons who hold an operator certification or persons wishing to be certified to dispute the validity of the examination, the content of the test, the content outlines, or the registration process. The Process is not for trainers or certified persons disputing Continuing Education Hours (CEHs).

### 2. Dispute Resolution Process

The dispute resolution process consists of three steps.

#### a. NERC System Operator Certification Program Staff

The first step in the process is for the person with a dispute to contact the NERC System Operator Certification Program staff. Contact may be made by a phone call or e-mail to the program staff. This first step can usually resolve the issues without further actions. It is expected that most disputes will be resolved at this step.

Any dispute that requires resolution will first be brought to the NERC System Operator Certification Program staff. Should the issue(s) not be resolved to the satisfaction of the parties involved, the issue can be brought to the Personnel Certification Governance Committee (PCGC) Dispute Resolution Task Force.

#### b. Personnel Certification Governance Dispute Resolution Task Force

If the NERC staff did not resolve the issue(s) to the satisfaction of the parties involved, a written request should be submitted to the chairman of the PCGC through NERC staff explaining the issue(s) and requesting further action. Upon receipt of the letter, the PCGC chairman will present the request to the PCGC Dispute Resolution Task Force for action. This task force consists of three current members of the PCGC. The PCGC Dispute Resolution Task Force will investigate and consider the issue(s) presented and make a decision. This decision will then be communicated to the submitting party, the PCGC chairman, and the NERC staff within 45 calendar days of receipt of the request.

If a French-Canadian or Mexican party raises a dispute, the PCGC shall appoint a French-Canadian speaking or Spanish-speaking interpreter, respectively, as requested.

#### c. Personnel Certification Governance Committee

If the PCGC Dispute Resolution Task Force’s decision did not resolve the issue(s) to the satisfaction of the parties involved, the final step in the process is for the issue(s) to be brought before the PCGC. The disputing party shall submit a written request to the PCGC chairman through NERC staff requesting that the issue(s) be brought before the

PCGC for resolution. The chairman shall see that the necessary documents and related data are provided to the PCGC members as soon as practicable. The PCGC will then meet or conference to discuss the issue(s) and make their decision within 60 calendar days of the chairman's receipt of the request. The decision will be provided to the person bringing the issue(s) and the NERC staff. The PCGC is the governing body of the certification program and its decision is final.

### **3. Process Expenses**

All individual expenses associated with the Process, including salaries, meetings, or consultant fees, shall be the responsibility of the individual parties incurring the expense.

### **4. Decision Process**

Robert's Rules of Order shall be used as a standard of conduct for the Process. A simple majority vote of the members present will decide all issues. The vote will be taken in a closed session. No one on the PCGC may participate in the dispute resolution process, other than as a party or witness, if he or she has an interest in the particular matter.

A stipulation of invoking the appeals process is that the entity requesting the appeal agrees that neither NERC (its members, Board of Trustees, committees, subcommittees, and staff), any person assisting in the appeals process, nor any company employing a person assisting in the appeals process, shall be liable, and they shall be held harmless against the consequences of or any action or inaction or of any agreement reached in resolution of the dispute or any failure to reach agreement as a result of the appeals proceeding. This "hold harmless" clause does not extend to matters constituting gross negligence, intentional misconduct, or a breach of confidentiality.

## Section V — Disciplinary Action

### 1. Purpose

This disciplinary action procedure is necessary to protect the integrity of the system operator credential. Should an individual act in a manner that is inconsistent with expectations, this procedure describes the process to investigate and take action necessary to protect the credential.

### 2. Grounds for Action

The following shall serve as grounds for disciplinary action:

- a. Willful, gross, and/or repeated violation of the NERC Reliability Standards as determined by a NERC investigation.
  - i. Both the organization and the certified system operator are bound by the NERC Reliability Standards. If a certified system operator, either in concert with the organization or on his or her own initiative, performs a willful, gross, and/or repeated violation of the NERC Reliability Standards, he or she is liable for those actions and disciplinary actions may be taken against him or her.
- b. Willful, gross, and/or repeated negligence in performing the duties of a certified system operator as determined by a NERC investigation.
- c. Intentional misrepresentation of information provided on a NERC application for a system operator certification exam or to maintain a system operator credential using CEH.
- d. Intentional misrepresentation of identification in the exam process.
  - i. This includes, but is not limited to, a person identifying himself or herself as another person to obtain certification for the other person.
- e. Any form of cheating during a certification exam.
  - i. This includes, but is not limited to, bringing unauthorized reference material in the form of notes, crib sheets, or other methods of cheating into the testing center.
- f. A certified system operator's admission to or conviction of any felony or misdemeanor directly related to their duties as a system operator.

### 3. Hearing and Appeals Process

Upon report to NERC of a candidate's or certified system operator's alleged misconduct, the NERC Personnel Certification Governance Committee (PCGC) Credential Review Task Force will convene for the determination of facts. An individual, government agency, or other investigating authority can file reports.

Unless the task force initially determines that the report of alleged misconduct is without merit, the candidate or certified system operator will be given the right to notice of the allegation. A hearing will be held and the charged candidate or certified system operator will be given an opportunity to be heard and present further relevant information. The task force may seek out information from other involved parties. The hearing will not be open to the public, but it will be

open to the charged candidate or certified system operator and his or her representative. The task force will deliberate in a closed session, but the task force cannot receive any evidence during the closed session that was not developed during the course of the hearing. The task force's decision will be unanimous and will be in writing with inclusion of the facts and reasons for the decision. The task force's written decision will be delivered to the PCGC and by certified post to the charged candidate or certified system operator. In the event that the task force is unable to reach a unanimous decision, the matter shall be brought to the full committee for a decision.

The task force's decision will be one of the below:

**a. No Action**

Allegation of misconduct was determined to be unsubstantiated or inconsequential to the credential.

**b. Probation**

A letter will be sent from NERC to the offender specifying:

- i. The length of time of the probationary period (to be determined by the PCGC).
  - (a) Credential will remain valid during the probationary period.
  - (b) The probationary period does not affect the expiration date of the current certificate.
- ii. During the probationary period, a subsequent offense of misconduct, as determined through the same process as described above, may be cause for more serious consequences.
  - (a) Extension of probation,
  - (b) Revocation for cause, or
  - (c) Termination of credential.

**c. Revoke for Cause**

A letter will be sent from NERC to the offender specifying:

- i. The length of time of the revocation period (to be determined by the PCGC).
  - (a) Credential is no longer valid.
  - (b) Successfully passing an exam will be required to become certified.
  - (c) An exam will not be authorized until the revocation period expires.

**d. Termination of Credential**

A letter will be sent from NERC to the offender specifying:

- i. Permanent removal of credential.

**4. Appeal Process**

The decision of the task force may be appealed using the NERC [System Operator Certification Dispute Resolution](#) process.

## **5. Credential Review Task Force**

The Credential Review Task Force shall be comprised of three active members of the PCGC assigned by the Chairman of the PCGC on an ad hoc basis. No one on the credential review task force may have an interest in the particular matter.

The task force will meet in a venue determined by the task force chairman.

If a French-Canadian or Mexican party raises a dispute, the PCGC shall appoint a French-Canadian speaking or Spanish-speaking interpreter, respectively, as requested.



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## Glossary

- G01. **CE Hour:** Sixty minutes of participation in a group, independent study, or self-study learning activity as approved by the NERC CE Program.
- G02. **CE Program Provider:** The individual or organization offering a learning activity to participants and maintaining documentation required by these criteria.
- G03. **Certification:** An official recognition that indicates the recipient has passed a NERC exam or completed a specified number of continuing education hours.
- G04. **Credential:** NERC designation that indicates the level of qualification achieved (i.e., Reliability Operator; Balancing, Interchange, and Transmission Operator; Balancing and Interchange Operator; and Transmission Operator).
- G05. **Credential Maintenance:** Meet NERC Continuing Education Hours' requirements to maintain a valid NERC-issued system operator credential.
- G06. **NERC-Approved Learning Activity:** Training that maintains or improves professional competence and has been approved by NERC for use in its Continuing Education Program.
- G07. **Probation:** A step in the disciplinary process during which the certificate is still valid. During the probationary period, a subsequent offense of misconduct, as determined through the same process as described above, may be cause for more serious consequences.
- G08. **Revoked:** A NERC certificate which has been suspended for more than twelve months. While in this state, a certificate holder can not perform any task that requires an operator to be NERC-certified. The certificate holder will be required to pass an exam to be certified again. Any CEH accumulated prior to or during the revocation period will not be counted towards certificate maintenance.
- G09. **Revoke for Cause:** A step in the disciplinary process during which the certificate is no longer valid and requiring successfully passing an exam to become certified. However, an exam will not be authorized until the revocation period expires. CEH earned before or during this revocation period will not be counted for maintaining a credential.
- G10. **Suspended:** Certificate status due to an insufficient number of CEH being submitted prior to the expiration of a certificate. While in this state, a certificate holder can not perform any task that requires an operator to be NERC-certified.
- G11. **Termination of Credential:** A step in the disciplinary process whereby a credential is permanently revoked.
- G12. **Type of CEH:** NERC approved learning activity covering topics from Appendix A, NERC standards and/or simulations for which there is a minimum requirement for credential maintenance.

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## Appendix A — Recognized Operator Training Topics

1. **Basic Concepts**
  - a. Basic electricity including capacitance, inductance, impedance, real and reactive power
  - b. Single phase & three phase power systems
  - c. Transmission line and transformer characteristics
  - d. Substation layouts including the advantages and disadvantages of substation bus schemes
2. **Production & Transfer of Electric Energy**
  - a. How generators produce electricity
  - b. Types of generators including advantages and disadvantages of each type
  - c. Economic operation of generators
  - d. Real and Reactive power flow
3. **System Protection**
  - a. Transmission line, transformer, and bus protection principles
  - b. Generator protection principles
  - c. Types of relays used in different protection schemes
  - d. The role of communication systems in system protection
4. **Interconnected Power System Operations**
  - a. Voltage control
  - b. Frequency control
  - c. Power system stability
  - d. Facility outage response
  - e. Automatic Generator Control (AGC) including the different modes of AGC
  - f. Extra High Voltage (EHV) operation
  - g. Energy accounting
  - h. Inadvertent energy
5. **Emergency Operations**
  - a. Loss of generation resource
  - b. Operating reserves
  - c. Contingency reserves
  - d. Line loading relief
  - e. Loop flow
  - f. Load shedding
  - g. Voltage and reactive flows during emergencies
  - h. Loss of critical transmission facilities
6. **Power System Restoration**
  - a. Restoration philosophies
  - b. Facility restoration
  - c. Black start restoration
  - d. Load shedding
  - e. Under-frequency load shedding
  - f. Under-voltage load shedding

**7. Market Operations**

- a. Standards of Conduct
- b. Tariffs
- c. Transmission reservations and transmission priorities
- d. Transaction tagging

**8. Tools**

- a. Supervisory Control and Data Acquisition
- b. Automatic Generation Control application
- c. Power flow application
- d. State Estimator application
- e. Contingency analysis application
- f. P-V Curves
- g. Load forecasting application
- h. Energy accounting application
- i. OASIS application
- j. E-Tag application
- k. Voice and data communication systems

**9. Operator Awareness**

- a. Identifying loss of facilities
- b. Recognizing loss of communication facilities
- c. Recognizing telemetry problems
- d. Recognizing and identifying contingency problems
- e. Communication with appropriate entities including the Reliability Coordinator

**10. Policies & Procedures**

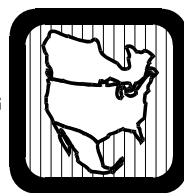
- a. NERC Reliability Standards
- b. ISO/RTO operational and emergency policies and procedures
- c. Regional operational and emergency policies and procedures
- d. Local & company specific policies and procedures
- e. Emergency operating plans
- f. Line loading relief procedures
- g. Physical and cyber sabotage procedures
- h. Outage management and switching procedures

**11. NERC Reliability Standards**

- a. Application and/or implementation of NERC Reliability Standards

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# Reliability Readiness Audit and Improvement Program Procedure & Appeals Process



North American Electric Reliability Council

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## **Section I — Reliability Readiness Audit and Improvement Program Procedures**

### **Executive Summary**

This document sets forth the audit procedure NERC has adopted for use in its Reliability Readiness Audit and Improvement Program. The goal of the program is to assess the readiness of reliability coordinators (RC), balancing authorities (BA), and transmission operators (TOP) to operate the bulk power system reliably, and identify opportunities for improvement. It is not a part of the compliance enforcement program.

The audit procedure is to be applied using NERC reliability standards as a foundation, supplemented by other reference documents and audit criteria. As with all NERC reliability standards, the NERC regions may adopt specific requirements and guidelines to be used in conjunction with but not in place of these procedures. In choosing to do so, however, the regions cannot lessen the NERC-established procedure and requirements without formal approval from NERC.

RCs, BAs, and TOPs may delegate responsibilities to other entities in carrying out their functions. NERC may perform audits of these entities in association with a readiness audit to ensure the delegation supports reliable operation of the bulk electric system.

The NERC staff shall have overall responsibility for coordinating readiness audits in accordance with the following Readiness Audit Procedure as approved by the NERC Compliance and Certification Committee (CCC).

NERC and the regions will have the primary responsibility for executing the steps in this procedure. The steps are summarized as follows:

- Development of overall audit schedule
- Initiation of audit process for an entity
- Provision of criteria and documentation
- Identification of readiness audit team members
- Coordination of audited entity and neighboring entity questionnaires
- Publication of audit findings

The audit team is tasked with reviewing an entity's questionnaire responses and documentation, performing the on-site audit, and preparing a report of its findings.

## **Scheduling**

1. NERC staff in conjunction with the Compliance and Certification Managers Committee (CCMC) shall prepare a three-year cycle of readiness audits that will be updated by June 30 of each year.
  - a. RC audits shall be maintained on its previous schedule: from Tuesday to Thursday on the second week of April, May, and June, and September, October, and November each year with adjustments made to accommodate scheduling conflicts.
  - b. BAs, TOPs, and other entities will be scheduled throughout the year according to an agreed-upon schedule developed by the CCMC.
2. The CCMC representatives will identify a contact person at each operating entity who shall be responsible for coordinating the on-site audit. The list of contacts will be reviewed and updated at each CCMC meeting.
3. An audit team will be selected sixty days in advance of the audit, and will consist of the following members selected by the entity identified in parenthesis:
  - a. One co-team leader (NERC staff)
  - b. One co-team leader - compliance manager/representative or designated alternate from region being audited (region)
  - c. One compliance manager/representative or designated alternate from another Interconnection (other regions)
  - d. Up to two representatives from different operating entities within the same region (region)
  - e. One representative from another region within the same Interconnection (other regions)
  - f. One CCC representative not associated with the RC to serve on the RC readiness audit (CCC)
  - g. Up to two representatives from regulatory agencies with jurisdiction over the entity (United States, Canada, or Mexico government regulatory agencies)
  - h. Optional:  
One individual with operational and/or longer-term planning expertise if this experience is not available through other selected representatives.

If no other team representative is NERC-certified, up to two NERC-certified shift operators at a level at least equivalent to the functions being performed by the entity being audited (regions)

The selected team should possess a good cross-section of operating and planning expertise with each member having at least five years of industry experience.

To maintain the focus and size of the audit team, the use of observers will be limited. Observers must be expressly agreed upon by both NERC and the entity being audited. The role of observers is limited to observing the audit process. Observers shall not

participate in the creation and editing of the report or its findings. The team leader may remove any observer from the audit who is not abiding by these criteria.

### **Pre-Audit**

1. An initial letter will be sent to the entity being audited at least sixty calendar days prior to the audit and will include a request for information and a questionnaire. The entity will have seven calendar days to provide the requested information, and must submit the completed questionnaire no later than thirty calendar days prior to the audit.
2. After receiving the initial request for information, and fifty calendar days prior to the audit, a questionnaire will be sent to the neighboring operating entities with whom the audited entity routinely interacts. These questionnaires are to be completed and returned within fourteen calendar days of receipt, and no later than thirty calendar days prior to the audit.
3. All audit team members and observers must sign and abide by a NERC confidentiality agreement prior to participating in any of the audit activities. Copies of the signed confidentiality agreements will be maintained by the team leader and be available upon request by the audited entity.
4. The audit team will receive the following information upon receipt of the signed confidentiality agreements, and at least twenty-one calendar days prior to the audit:
  - a. The entity's completed questionnaire and electronic versions of any supporting documents sent by the entity to be audited
  - b. The neighboring operating entities' completed questionnaires
  - c. The on-site audit agenda and an agenda for the preaudit team meeting
5. A reminder letter will be sent to the entity to be audited and to the audit team seven calendar days prior to the audit. Travel arrangements and confirmation of accommodation will be the responsibility of each audit team member. The audit team members need to confirm contact information and expected arrival and departure times to the NERC co-team leader within seven calendar days of the audit date.

### **On-Site Audit**

1. The audit team will meet the day before the on-site audit begins to review questionnaire responses, identify areas requiring further investigation, discuss concerns, coordinate the interview process, and assign responsibilities during the on-site visit. This meeting will take place at the audited entity's facility or at a location agreed upon by the audit team. Among the items discussed will be the protocol for addressing disputed issues among team members.
2. The audit team assessment will be based on data collected from the audited entity's questionnaire and documentation, neighboring operating entity questionnaires, and from observations and information collected during the on-site visit.
3. If the audit team finds evidence of possible noncompliance with a NERC standard, it shall notify the NERC vice president of compliance who will refer the matter to the compliance manager for the region in which the entity is located for resolution through that region's compliance enforcement program. If the issue is an immediate threat to reliability, the



NERC co-team leader shall notify the NERC vice president of compliance within twenty-four hours of discovery.

4. Upon completion of the on-site audit, the audit team will give the entity a presentation of preliminary findings and recommendations that will be included in the audit report.

### **Preparation and Posting of the Audit Report**

1. The draft audit report will be completed by the team co-leaders, and will be sent to the audit team for review within fourteen calendar days of the on-site audit. The audit team will then have seven calendar days to respond to the draft audit report. If a team member does not respond within that time, such nonresponse will be considered agreement with the content of the report.
2. The draft audit report will then be sent to the audited entity for its review to ensure that there are no mistakes in the report. The audited entity will have twenty-one calendar days to respond to the draft audit report. If the audited entity does not respond within that time, such nonresponse will be considered agreement with the content of the report. The audited entity may provide feedback in the form of corrections and clarifications that will be considered by the audit team for inclusion in the final audit report.
3. After agreeing on any final corrections, the audit team may elect to provide the audited entity the opportunity to review the changes if deemed significant. Otherwise, the final audit report will be posted on the NERC Web site within sixty calendar days of the completion of the audit. Information deemed to be critical or sensitive to electrical infrastructure will be redacted before posting. The audited entity will make the determination about what information will be redacted. Should the audited entity disagree with the team findings, the entity may provide a statement in writing to be posted on the NERC Web site in conjunction with the final report.
4. Should the audited entity seek adjudication of a dispute of the findings or recommendations through the NERC dispute resolution process, it shall notify NERC within fourteen calendar days from the time the audit is posted and transmitted to the entity. NERC will initiate the NERC Appeals Process for Compliance Enforcement and Readiness Audit Programs. Resolution will be provided within ninety calendar days from initial notification. The final report shall remain posted during the appeals process.
5. In response to the posted audit report and within forty-five calendar days of the date of posting, the audited entity will supply a response plan to NERC addressing the report recommendations, including a timeline for implementation. This response plan will be published on the NERC Web site when submitted by the entity.
  - a. If the entity requests, NERC will offer assistance in developing a suitable response plan to address the report's recommendations. The entity should notify the NERC vice president of compliance of its desire to request assistance.
6. If deemed necessary, NERC will direct that a mid-cycle (eighteen month) follow-up audit be scheduled.

**Monitoring Recommendation Implementation**

1. The NERC vice president of compliance shall monitor the implementation of the report's recommendations and the entity's response plan, and report progress to the NERC Board of Trustees.

## **Section II — Reliability Readiness Audit and Improvement Program Appeals Process**

### **Overview**

NERC's mission is to ensure that the bulk electric system in North America is reliable, adequate, and secure. Since its formation in 1968, NERC has operated successfully as a voluntary, self-regulatory organization, relying on reciprocity, peer pressure, and the mutual self-interest of all those involved.

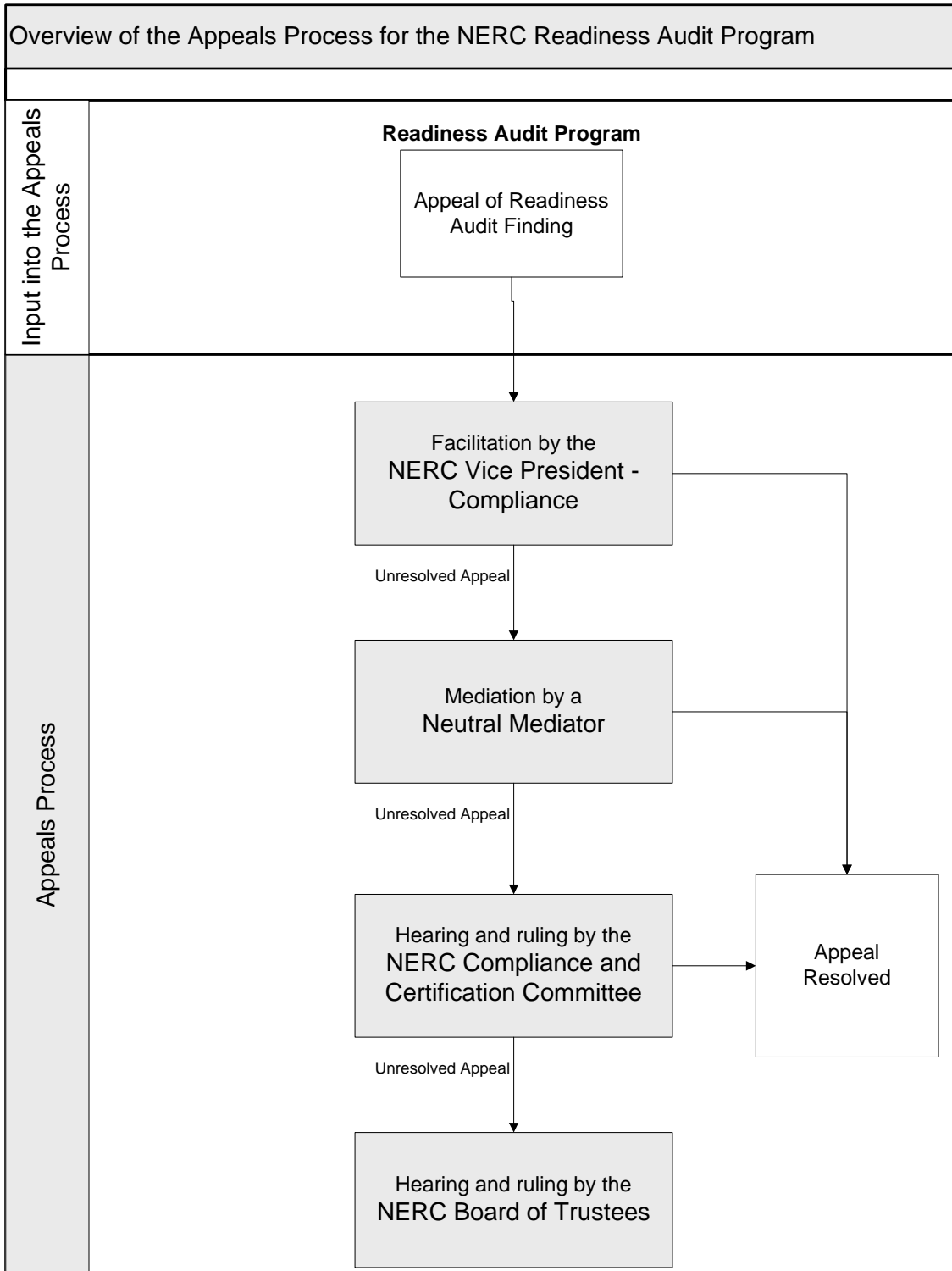
The NERC Reliability Readiness Audit and Improvement Program provides a key means to fulfill NERC's mission. In conducting this program, NERC has established documented procedures and will ensure due process to achieve fair and equitable readiness assessments, and guard against premature, incomplete, or inaccurate public disclosure of these assessments. All disclosures resulting from this program will be consistent with NERC's Guidelines for Reporting and Disclosure.

### **Scope**

This document describes the process for appealing the findings of the readiness audit program. An entity audited under the readiness audit program can file an appeal using this process.

The NERC Reliability Readiness Audit and Improvement Program appeals process will apply to an appeal under the readiness audit program, as shown at the top of Figure 1.

Figure 1: Appeals Process Overview



### **Appeal of a NERC Reliability Readiness Audit and Improvement Program Finding**

Entities that participate in the readiness audit program are subject to on-site audits conducted by a NERC readiness audit team. In addition to providing recommendations for improvement, the audit team may identify “examples of excellence” that an audited entity employs during the conduct of its business. The audits are conducted in accordance with the document entitled, NERC Readiness Audit Procedure.

1. Upon completion of its on-site audit, the team prepares and posts a final report documenting its findings. An audited entity may appeal one or more of the findings of the audit.
  - a. If the audited entity chooses to appeal a finding, it must notify the NERC vice president–compliance in writing that it wishes to invoke the NERC appeals process. The vice president–compliance is the main contact for all parties in all four steps of the process.
2. If an appeal is not filed in writing within fourteen calendar days of the date that the readiness audit report is issued, the readiness audit report shall be considered final and non-appealable.
3. Each party in the appeals process shall pay its own expenses for each step of the process except for the neutral mediation. The party pursuing neutral mediation shall be responsible for paying the neutral mediator.
4. A condition of invoking the appeals process is that the entity agrees that neither NERC (its members, board of trustees, committees, subcommittees, and staff), any person assisting in the appeals process, nor any company employing a person assisting in the appeals process, shall be liable and they shall be held harmless against the consequences of or any action or inaction or of any agreement reached in resolution of the dispute or any failure to reach agreement as a result of the appeals proceeding. This “hold harmless” clause does not extend to matters constituting gross negligence, intentional misconduct, or a breach of confidentiality.
5. Parties retain whatever rights they may have to seek further review of a decision in whatever court or regulatory agency may have jurisdiction

### **Facilitation by the NERC Vice President–Compliance**

1. Upon receiving a request for appeal, the NERC vice president–compliance will contact the parties involved and attempt to resolve the appeal within fourteen calendar days of receiving the notice of appeal.
2. The vice president—compliance will review the issues at hand and, if necessary, consult other parties to obtain additional information in an attempt to resolve the dispute.
  - a. If the vice president—compliance is able to resolve the appeal, he will notify the NERC Compliance and Certification Committee (CCC) of the outcome and how the appeal was resolved.
  - b. If no resolution is achieved and either party wishes to pursue the appeal further, it shall notify the NERC vice president—compliance within seven calendar days. The vice president–compliance will forward the appeal within seven calendar days to the CCC and make arrangements for neutral mediation.

### **Mediation by a Neutral Party**

A neutral mediator will be selected within fourteen calendar days of the vice president–compliance forwarding the unresolved appeal to the CCC.

1. The neutral mediator will be acceptable to all parties involved in the dispute. The NERC audit team leader will act on behalf of the audit team for a readiness audit or regional compliance enforcement program audit dispute, and the chair of the Compliance and Certification Managers Committee (CCMC) will act on behalf of the CCMC for a dispute of a finding of noncompliance with a measure directly monitored by NERC.
2. The parties shall prepare a list of proposed mediators, each submitting no more than three names for consideration.
  - a. All mediators proposed by the parties must be knowledgeable of the issues related to the reliability and adequacy of the interconnected bulk power supply system, including, but not limited to, issues related to planning and operations. The mediator also must be trained in mediation skills.
3. The parties will select the neutral mediator from the prepared list by agreement, or, in the absence of agreement, alternately striking names from the list in turn (beginning with the party that wins a coin toss for this purpose) until only one mediator remains.
4. A one-day mediation session will be held within fourteen calendar days of the selection of a neutral mediator at which time each party will present its side of the appeal.
5. The neutral mediator will ask questions of both sides in an attempt to gather the information necessary to propose a solution to the dispute or otherwise assist the parties in resolving the dispute.
6. The parties can either accept or reject the proposed solution at the end of the one-day mediation session.
  - a. If either party wishes to pursue the appeal further, it must notify the NERC vice president–compliance in writing within seven calendar days of the end of the mediation session.

### **Hearing and Ruling by the Compliance and Certification Committee**

In the event that the NERC vice president–compliance and mediation by a neutral mediator fail to resolve the dispute, the issue will be referred to the CCC for resolution.

1. Within twenty-eight calendar days of receiving notice from the NERC vice president – compliance that the neutral mediation did not resolve the appeal, the CCC will conduct a hearing where all the parties or representatives of the disputing parties will present the issue in question.
2. The CCC must have a quorum present to conduct the hearing. The hearing shall be closed to the public to protect confidential information.
  - a. CCC members who are interested parties or have an interest in the outcome shall not participate in the hearing.

3. The CCC will deliberate the issue in a one-day session, take a vote on how to resolve the appeal, and recommend a resolution based on a majority vote, all according to established CCC procedures.
4. Should both parties accept the solution, the matter will be considered resolved and the process terminated.
5. If, however, either of the parties wishes to pursue the appeal further, or if the CCC process cannot be completed in accordance with the timeline of the appeals process outlined in this document, the NERC vice president–compliance shall be notified within seven calendar days.
6. The NERC vice president–compliance will forward the appeal to the NERC Board of Trustees within seven calendar days of being notified for resolution.

### **Hearing and Ruling by the NERC Board of Trustees**

The NERC Board of Trustees will be asked to resolve a dispute related to the NERC Compliance Enforcement Program if and only if the prior steps outlined in this procedure have failed to render an acceptable solution.

1. At the next regularly scheduled NERC board meeting, or at a special meeting if the board determines it is necessary, the chairman of the CCC will present to the board a summary of the dispute and the actions taken in an attempt to resolve it.
  - a. Each party will then present their side of the dispute.
  - b. The NERC board will then decide the dispute.
2. A record of the appeals process shall be maintained and available upon request, as per the *Guidelines for Reporting and Disclosure*. Confidentiality issues will be judged in accord with the *Guidelines for Reporting and Disclosure*.

### **General Requirement**

Parties are entitled to a fair and impartial appeals process. No one with a direct interest in a dispute may participate in the appeals process except as a party or witness.

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# NERC Blackout and Disturbance Response Procedures



North American Electric Reliability Council



# NERC Blackout and Disturbance Response Procedures

## Introduction

NERC, through its professional staff and the regional reliability councils and their members, provides the best source of technical and managerial expertise for responding to major events that affect the bulk electric system.

NERC's role following a blackout or other major bulk electric system disturbance or emergency is to provide leadership, coordination, technical expertise, and assistance to the industry in responding to the event. Working closely with the RROs and reliability coordinators, NERC would coordinate efforts among industry participants, and with state, federal, and provincial governments in the United States and Canada to support the industry's response.

When responding to any event where physical or cyber security is suspected as a cause or contributing factor to an event, NERC would immediately notify appropriate government agencies and coordinate its investigation with them.

During the conduct of some NERC-level investigations, assistance may be needed from government agencies. This assistance could include: authority to require data reporting from affected or involved parties; communications with other agencies of government; investigations related to possible criminal or terrorist involvement in the event; resources for initial data gathering immediately after the event; authority to call meetings of affected or involved parties; and technical and analytical resources for studies. If a federal or multi-national government investigation is called for, government agencies should work in primarily an oversight and support role, in close coordination with the NERC investigation.

It is critical to establish, up front, a clear delineation of roles, responsibilities, and coordination requirements among industry and government for the investigation and reporting of findings, conclusions, and recommendations related to major blackouts, disturbances, or other emergencies affecting the bulk electric system.

These procedures do not represent a "cookbook" to be followed blindly. They provide a framework to guide NERC's response to events that may have multiregional, national, or international implications. Experienced industry leadership would still be required to tailor the response to the specific circumstances of the event.

Responding to major blackouts and other system disturbances can be divided into four phases:

1. situation assessment and communications
2. situation tracking and communications
3. investigation, analysis and reporting, and
4. follow-up on recommendations

## Phase 1 — Situation Assessment and Communications

NERC's primary roles in Phase 1 are to:

- conduct an initial situation assessment;
- call for a NERC-level investigation where warranted;
- collect and analyze data and information;

- issue initial findings, conclusions, and recommendations;
- maintain detailed data records (not subject to Freedom of Information Act);
- assist government agencies in criminal investigations when relevant;
- provide technical expertise for modeling and analyzing the disturbance; and
- follow up on recommendations.

While conducting its initial situation assessment, NERC will make an early determination as to whether the cause of the event may be related to physical or cyber security, and communicate as appropriate with government agencies.

Notice of a disturbance is typically received by the NERC Electricity Sector Information Sharing and Analysis Center (ESISAC) person on duty and relayed to other appropriate NERC personnel.<sup>1</sup> NERC performs an initial situation assessment by contacting the appropriate reliability coordinator(s), and makes a decision on whether to activate its crisis communications plan. At the initial stage in gathering information about an incident, it is critical to minimize interference with bulk electric system operators who are in the process of restoring the system. To minimize interference with their work, NERC, in its capacity as the ESISAC, should serve as the primary communications link with government agencies.

The ESISAC Concept of Operations (ConOps) specifies the operations plan, communications procedures, and logistics NERC will follow during normal conditions, emergencies, and National Security Special Events. The ConOps includes the primary points of contact (24x7) for the Federal Energy Regulatory Commission, U.S. Department of Energy, U.S. Department of Homeland Security, U.S. Nuclear Regulatory Commission, and Public Safety and Emergency Preparedness Canada.

It is important that during these early hours the ESISAC, in coordination with government agencies, determine whether this event was caused by the actions of criminal or terrorist parties. The results of this criminal assessment are essential to operators because if there is a possibility that the “attack” is still ongoing, restoration and response actions would need to be tailored to these circumstances. If NERC and government agencies deem it necessary for further criminal investigations, NERC will issue a formal notice to affected systems to retain all relevant information gathered during this and subsequent phases of an investigation.

The specific criteria for reporting disturbances and other events is described in NERC Reliability Standard [EOP-004-0](#). These criteria and procedures are intended to provide a common basis for consistent reporting of abnormal system conditions and events that occur in North America. All entities responsible for the reliability of bulk electric systems in North America must ensure that sufficient information is submitted to NERC within the time frame required. Reliability coordinators will use the Reliability Coordinator Information System (RCIS) as the primary method of communications to NERC. The ESISAC duty person is responsible for monitoring the RCIS for such notifications.

Depending on the scope and magnitude of the event, NERC will issue media advisories through its crisis communications plan.

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<sup>1</sup> NERC maintains 24x7 contact information for its key personnel to facilitate such contacts.  
NERC Blackout and Disturbance Response Procedures

## Phase 2 — Situation Tracking and Communications

Based on the nature and severity of the event, in Phase 2 NERC will continue to track progress in restoring the bulk electric system and service to customers, and keep industry, government agencies, and the public informed. The most important thing to recognize in this phase is that the primary focus of reliability coordinators and transmission operators is the prompt restoration of the bulk electric system. NERC will coordinate requests by government agencies for information from reliability coordinators and transmission operators, and serve as a conduit and coordinator between industry and government for regular status reports on the restoration.

As events continue, NERC will determine whether a detailed investigation of the event should be conducted, and start to identify manpower requirements, data retention requirements, and at what level the investigation should be conducted. If the event is localized within a region, NERC could request that the regional council take the lead in conducting the investigation.

## Phase 3 — Investigation, Analysis, and Reporting

Based on the scope, magnitude, and impact of an event, during Phase 3 NERC may:

1. rely on one of its regional councils to conduct the investigation;
2. work with a regional council in its investigation; or
3. conduct a NERC-level investigation.

The NERC CEO will decide, based on the initial situation assessment and consultation with the NERC Technical Steering Committee<sup>2</sup>, if a NERC-level investigation is warranted. If a NERC-level investigation is to be conducted, the NERC CEO will appoint a senior member of NERC staff to lead the investigation and assemble a high-level technical steering group to provide guidance and support throughout the investigation.

The first task of the NERC staff investigation team leader would be to identify what technical and other resources and data would be needed from staff, the industry, and government, and to issue those requests immediately. This task will include identification of any special managerial, forensic, or engineering skills needed for the investigation. Secondly, the team leader must issue requests for those resources and information. Third, the team leader must organize the teams that will conduct and report on the investigation.

The teams needed for a particular investigation will vary with the nature and scope of the blackout or disturbance. [Attachment A](#) describes the typical teams that would be required and [Attachment B](#) provides suggested guidelines for the investigation team scopes. Individuals that participate on these teams will be expected to sign an appropriate confidentiality agreement. NERC uses a standard (pro forma) confidentiality agreement ([Attachment C](#)) for participants in blackout investigations, which it will adapt for specific investigations.

The Blackout and Disturbance Investigation Objectives, Analysis Approach, Schedule, and Status ([Attachment D](#)) and Guidelines for NERC Reports on Blackouts and Disturbances ([Attachment E](#)) are used to guide and manage investigations and reporting on major blackouts and disturbances.

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<sup>2</sup> NERC will maintain a list of 24x7 contact information for members of its Technical Steering Committee.

A NERC-level investigation will comprise (a) constructing a detailed sequence of events leading to and triggering the disturbance; (b) assembling system models and data and conducting detailed system analysis to simulate pre- and post-disturbance conditions; and (c) issuing findings, conclusions, and recommendations. The details of these three phases of the investigation are:

**a. Detailed Sequence of Events**

- Construct a detailed sequence of events leading to and triggering the disturbance. Reconcile event logs, disturbance recorders, operator transcripts, and other system data to create an accurate sequence of events.
- Enter and preserve all data in a secure data warehouse.

**b. Detailed System Analysis**

- Assess the sequence of events to determine critical times for study.
- Assemble the necessary system models and data from regions and operating entities to accurately model (with power flow and dynamic simulations) the pre-disturbance conditions.<sup>3</sup> Determine pre-disturbance conditions at critical times prior to event initiation, including an assessment of reliability margins in the pre-disturbance time frame.
- Analyze data from high-speed data recorders, digital fault recorders, and system relay targets.<sup>4</sup>
- Analyze generator and load performance, including underfrequency and undervoltage relay actions.
- Use the model information and sequence of events to dynamically model the trigger events and the outage sequence. Identify the system phenomena that propagated the failure. Provide graphical results showing the nature of the cascade. Conduct additional analyses as initial findings identify the need for further study.

**c. Findings, Conclusions, and Recommendations**

- Identify and assess failures contributing to the disturbance, including possible instability conditions, system protection mis-operations, generator actions, etc.
- Either identify or rule out man-made/criminal cyber or physical attacks on the electric system.
- Assess the adequacy of and compliance with reliability standards, procedures, and plans.
- Determine if the system was being operated within equipment and system design criteria at the time of the outage.
- Assess the qualifications, training, SCADA/EMS tools, and communications available to system operators and reliability coordinators, and how effective these were leading up to and during the event.
- Assess the adequacy of communications system and communications among system operators.

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<sup>3</sup> NERC is developing standards for data and model validation that will facilitate modeling activities in future blackout investigations.

<sup>4</sup> NERC is developing standards for dynamic monitoring equipment and the deployment of such equipment at critical locations in the bulk electric system.

- Identify any issues regarding maintenance or equipment conditions that may have contributed to the outage.
- Determine whether system restoration procedures were available and adequate. Identify any issues that caused unexpected delays in the restoration of generators and loads.
- Identify the root causes<sup>5</sup> and contributing factors of the cascading outage.
- Recommend actions to prevent cascading outages in the future and to improve system reliability.
- Determine whether the system adequately designed.

#### **Phase 4 — Follow-up on Recommendations**

For Phase 4 NERC and the regions will follow up on specific recommendations coming from all investigations, whether done at the regional or NERC level. In certain cases, where government agencies have taken a direct role in the investigation, reports will be made to those agencies on progress in addressing the recommendations.

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<sup>5</sup> NERC will rely on root cause analysis experts, both from within the industry and outside consultants, to conduct these analyses.

## Typical Team Assignments for Investigation of Significant Blackouts or Disturbances<sup>6</sup>

### Fact-Finding Teams

- Physical and/or cyber security (if needed)
- On-site interviews
- System data collection (frequency, voltages, generation and loads)<sup>7</sup>
- System protection and control information
- System restoration
- Coordination with regional teams

### Assessment and Analysis Teams

- Performance of generation and transmission protection systems
- Frequency analysis
- Equipment maintenance
- SCADA/EMS/Tools
- Operator training
- Standards compliance
- System planning
- System operation
- System restoration
- Root cause analysis
- System simulation
- Interregional coordination
- Vegetation management
- Recommendations for future actions
- Security and law enforcement liaison

### Data Management Teams

- Data requests
- Data collection
- Data warehouse – entry, logging, retention, and maintenance<sup>8</sup>
- Data release<sup>9</sup>

### Report Writing Teams

- Text
- Graphics
- Presentations

### Communications Teams

- Press releases

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<sup>6</sup> The investigation team leader will specify the tasks required of each team.

<sup>7</sup> Standard forms and procedures for the collection of data and information will be adapted for particular circumstances.

<sup>8</sup> Experience with data warehousing and access procedures gained during the investigation of the August 2003 blackout will be used in future investigations.

<sup>9</sup> Data release procedures will prevent inappropriate disclosure of information.

- Interface with government agencies
- Interviews

## NERC Blackout and Disturbance Response Procedures Guidelines for Investigation Team Scopes

Each blackout or disturbance is unique and will therefore demand a customized approach to its investigation. The following guidelines for investigation team scopes are suggestive rather than definitive. Not all the teams listed may be needed for a particular investigation.

**Root Cause Analysis** — Root cause analysis guides the overall investigation process by providing a systematic approach to evaluating root causes and contributing factors leading to the blackout or disturbance. This team works closely with the technical investigation teams and draws on other data sources as needed to record verified facts regarding conditions and actions (or inactions) that contributed to the blackout or disturbance. The root cause analysis guides the overall investigation by indicating areas requiring further inquiry and other areas that may be of interest regarding lessons learned, but are not causal to the blackout. Root cause analysis enables the investigation process develop a factual record leading to logical and defensible conclusions in the final report regarding the causes of the blackout.

**Data Requests and Management** — This team organizes large volumes of raw data and value-added information produced by analysts in support of the blackout investigation into a data warehouse. The team issues data requests from affected entities, catalogs and stores all data received, and provides secure and confidential access to teams and personnel supporting the investigation. The team serves as the single point for issuing data requests, receiving and storing data, and managing data queries by the investigation analysts, and is responsible for assuring consistency, security, and confidentiality of the data and minimizing redundant data requests.

**Sequence of Events** — A precise, accurate sequence of events is a building block for all other aspects of the investigation, and is a starting point for the root cause analysis. It is the basis for developing computer models to simulate system conditions and evaluate steady state and stability conditions in the period leading to blackout. The sequence of events is the foundation of facts upon which all other aspects of the investigation can proceed.

**System Modeling and Simulation Analysis** — System modeling and simulation allows the investigators to replicate system conditions leading up to the blackout. While the sequence of events provides a precise description of discrete events, it does not describe the overall state of the electric system and how close it was to various steady state, voltage stability, and power angle stability limits. An accurate computer model of the system, benchmarked to actual conditions at selected critical times, allows analysts to conduct a series of sensitivity studies to determine if the system was stable and within limits at each point in time leading up to the blackout, and at what point the system became unstable. It also allows analysts to test different solutions to prevent cascading. Although it is not possible recreate the entire blackout sequence, simulation methods will reveal the mode(s) of failure initiating the blackout and propagating through the system.

**Operations Tools, SCADA/EMS, Communications, and Operations Planning** — This team will assess the observability of the electric system to operators and reliability coordinators, and the availability and effectiveness of operational (real-time and day-ahead) reliability assessment tools, including redundancy of views and the ability to observe the “big picture” regarding bulk electric system conditions. The team also investigates the operating



practices and effectiveness of those practices of operating entities and reliability coordinators in the affected area. This team investigates all aspects of the blackout related to operator and reliability coordinator knowledge of system conditions, action or inactions, and communications.

**Frequency/ACE** — This team will analyze potential frequency anomalies that may have occurred, as compared to typical interconnection operations, to determine if there were any unusual issues with control performance and frequency and any effects they may have had related to the blackout.

**System Planning, Design, and Studies** — This team will analyze the responsibilities, procedures, and design criteria used in setting system operating limits, and compare them to good utility practice. The team will review the actual limits in effect on day of the blackout and whether these limits were being observed. The team will review voltage schedules and guides, and reactive management practices in the affected areas, including use of static and dynamic reactive reserves. The team will analyze the tagged and scheduled transactions to determine if inter-regional transfer limits were understood and observed. The team will analyze system planning and design studies completed in the affected areas to determine if operating conditions were consistent with the assumptions of those studies and whether the planning and design studies were sufficient and effective.

**Transmission System Performance, Protection, Control, Maintenance and Damage** — This team investigates the causes of all transmission facility automatic operations (trips and reclosures) leading up to the blackout on all facilities greater than 100 kV. This review includes relay protection and remedial action schemes, identifying the cause of each operation and any misoperations that may have occurred. The team also assesses transmission facility maintenance practices in the affected area as compared to good utility practice and identifies any transmission equipment that was damaged in any way as a result of the blackout. The team will also assess transmission line rating practices and the impact that ambient temperature and wind speeds had on the transmission line performance in terms of the design temperature of the transmission conductors. The team shall report any patterns and conclusions regarding what caused transmission facilities to trip; why the blackout extended as far as it did and not further into other systems; why the transmission separated where it did; any misoperations and the effect those misoperations had on the blackout; and any transmission equipment damage. The team will also report on the transmission facility maintenance practices of entities in the affected area compared to good utility practice. Vegetation management practices are excluded here and covered in a different team.

**Generator Performance, Protection, Controls, Maintenance and Damage** — This team will investigate the cause of generator trips for all generators with a 10 MW or greater nameplate rating leading to and through the end of the blackout. The review shall include the cause for the generator trips, relay targets, unit power runbacks, and voltage/reactive power excursions. The team shall report any generator equipment that was damaged as a result of the blackout. The team shall report on patterns and conclusions regarding what caused generation facilities to trip. The team shall identify any unexpected performance anomalies or unexplained events. The team shall assess generator maintenance practices in the affected area as compared to good utility practice. The team will analyze the coordination of generator under-frequency settings with transmission settings, such as under-frequency load shedding. The team will gather and analyze data on affected nuclear units and work with the Nuclear Regulatory Commission to address nuclear unit issues.

**NERC and Regional Standards/Procedures and Compliance** — This team reviews the adequacy of NERC Reliability Standards, regional standards and procedures, and the compliance NERC Blackout and Disturbance Response Procedures

monitoring program to address issues leading to the blackout. The team also reviews the compliance of the affected operating entities with Reliability Standards.

**Vegetation/ROW** — This team investigates the practices of transmission facility owners in the affected areas for vegetation management and ROW maintenance. These practices will be compared with accepted utility practices in general, and with NERC Reliability Standards. The team will evaluate whether the affected parties were within their defined procedures at the time of the blackout and will investigate historical patterns in the area related to outages caused by contact with vegetation.

**Investigation Process and Procedures Review** — This team will review the process and procedures used in the investigation of the blackout, make recommendations for improvement, and develop recommendations for appropriate processes, procedures, forms, etc. to guide and expedite future investigations including coordination and cooperation between NERC, its regions, and government agencies.

**Restoration Review** — All entities operating portions of the bulk electric system in North America are required by NERC Reliability Standards to maintain System Restoration Plans and Black Start Plans, and Reliability Coordinators are required to coordinate the implementation of those plans. This team will review the appropriateness and effectiveness of the restoration plans implemented and the effectiveness of the coordination of these plans.

**NERC CONFIDENTIALITY AGREEMENT  
FOR  
INVESTIGATION OF BLACKOUTS AND DISTURBANCES**

This Confidentiality Agreement (“Agreement”), dated \_\_\_\_\_, is between the North American Electric Reliability Council (“NERC”), and

\_\_\_\_\_, a member of the NERC Outage Investigation Team (“Team Member”)(collectively referred to as “Parties”).

**WHEREAS**, NERC is conducting an investigation of the power outage that occurred in \_\_\_\_\_ on \_\_\_\_\_ and related matters (“Outage”); and

**WHEREAS**, NERC has established a team to carry out that investigation (“Outage Investigation Team”); and

**WHEREAS**, in order for the Outage Investigation Team to fulfill its objectives, it is necessary for the Outage Investigation Team have access to confidential or business sensitive information from operating entities within the \_\_\_\_\_ and to be able to conduct open and unconstrained discussions among team members,

The Parties therefore agree as follows:

1. The term “Outage Investigation Information” means all information related in any way to the Outage that operating entities within the \_\_\_\_\_ or their representatives have furnished or are furnishing to NERC in connection with NERC’s investigation of the Outage, whether furnished before or after the date of this Agreement, whether tangible or intangible, and in whatever form or medium provided (including, without limitation, oral communications), as well as all information generated by the Outage Investigation Team or its representatives that contains, reflects or is derived from the furnished Outage Investigation Information; provided, however, the term “Outage Investigation Information” shall not include information that (i) is or becomes generally available to the public other than as a result of acts by the undersigned Parties or anyone to whom the undersigned Parties supply the Information, or (ii) is known to or acquired by the Team Member separate from receiving the information from the Outage Investigation Team.

2. The Team Member understands and agrees that the Outage Investigation Information is being made available solely for purposes of the Outage Investigation and that the Outage Investigation Information shall not be used in any manner to further the commercial interests of any person or entity. The Team Member further understands and agrees that he or she will not disclose Outage Investigation Information to any person who has not signed this Agreement except as such disclosure may be required by law or judicial or regulatory order.

3. If Team Member’s employing organization has signed the NERC Confidentiality Agreement for Electric System Security Data (“NERC Security Data Agreement”), paragraph 2 NERC Blackout and Disturbance Response Procedures

shall not be deemed to prohibit Team Member from disclosing Outage Investigation Information to other employees of that organization, but only to the extent that “security data” as defined in the NERC Security Data Agreement is shared within the organization.

4. The Parties expressly agree that Outage Investigation Information shall otherwise only be disclosed through official releases and reports as authorized by NERC.

5. It shall not be a violation of the NERC Confidentiality Agreement for Electric System Security Data for a Reliability Coordinator to furnish Outage Investigation Information to an Outage Investigation Team Member who has signed this Agreement.

6. This Agreement shall be for sole benefit of the parties hereto. This Agreement may be modified or waived only by a separate writing signed by the Parties. If any clause or provision of this Agreement is illegal, or unenforceable, then it is the intention of the Parties hereto that the remainder of this Agreement shall not be affected thereby, and it is also the intention of the Parties that in lieu of each clause or provision that is illegal, invalid or unenforceable, there be added as part of this Agreement a clause or provision as similar in terms to such illegal, invalid or unenforceable clause or provision as may be possible and be legal, valid and enforceable. This Agreement will be governed and construed in accordance with the laws of the State of New Jersey, except for any choice of law requirement that otherwise may apply the law from another jurisdiction.

7. This Agreement shall have a term of two (2) years from the date hereof, except that the obligations of paragraphs 2, 3, and 4 shall continue for five (5) years from the date hereof.

**NORTH AMERICAN ELECTRIC RELIABILITY COUNCIL**

By: \_\_\_\_\_

Printed: \_\_\_\_\_

Title: \_\_\_\_\_

**NERC OUTAGE INVESTIGATION TEAM MEMBER**

Signed: \_\_\_\_\_

Printed: \_\_\_\_\_

### NERC Blackout and Disturbance Investigation Objectives, Analysis Approach, Schedule, and Status

Investigation Objective	Investigation and Analysis Approach	Schedule	Status
<b>Pre-disturbance Conditions</b>			
1. What was the precursor sequence of events leading to the blackout?	<ul style="list-style-type: none"> <li>• Assemble data/alarm logs and time-stamped sequence information.</li> <li>• Develop and maintain an expanding database of log and time-stamped sequence information.</li> <li>• Develop a precursor sequence of high-level, events relevant to, and leading to blackout initiation.</li> <li>• Reconcile the precursor sequence of events with those emerging from regional councils, RTOs, and operating entities.</li> </ul>		
2. What time frames are relevant for pre-disturbance assessment of system conditions? What points in time should be used to establish a baseline set of study conditions when the system was last known to be stable and within normal operating criteria?	<ul style="list-style-type: none"> <li>• Referencing precursor sequence of events, determine relevant times to develop base case conditions (stable and within normal operating criteria).</li> <li>• Verify relevant time horizons and availability of system data at those times with regional councils, RTOS, and operating entities.</li> </ul>		
3. What models and data can best simulate system conditions prior to and during the disturbance event? What is the relevant scope of the system for detailed study (what is considered the boundary of the study system and what is considered neighboring or external systems?)	<ul style="list-style-type: none"> <li>• Identify up-to-date power system model(s) appropriate for load flows and transient and dynamic simulations (determine if detailed eastern interconnection model is needed or multi-regional model(s) are needed.</li> <li>• Identify what models are available in regional councils, RTOs, and operating entities.</li> <li>• Identify who will actually perform power flow, transient and dynamic simulations; hire contractor(s) as needed.</li> <li>• Identify and assemble data required for these models.</li> <li>• Develop and maintain a system data repository.</li> </ul>		
4. What system conditions existed in the precursor time horizon leading up to the blackout (at the times identified in 1.)?	<ul style="list-style-type: none"> <li>• Obtain and manage data for load flows: system configuration, planned and unplanned outages, unit commitment and dispatch, interchange schedules, congestion conditions, reserves, loads, state estimator snapshots, deratings and limitations, frequency, etc. Identify who will maintain and run load flows.</li> <li>• Work with regional councils, RTOs and operating entities to develop power flow cases defining the base conditions for each relevant time, ensuring the power flows model each critical juncture leading up to the blackout.</li> <li>• Identify and review results of additional studies completed by RTOs and operating entities.</li> </ul>		

Investigation Objective	Investigation and Analysis Approach	Schedule	Status
	<ul style="list-style-type: none"> <li>Assess the load flow results with respect to steady state operating criteria (was the system within all known limits at each precursor time)?</li> </ul>		
<p>5. Were there any prior-existing abnormalities, instabilities, reliability criteria violations, or reliability issues in the precursor sequence time horizon? Prior to blackout initiation were there any latent instability conditions that would suggest the system was at risk? Were the precursor conditions ones that had been previously studied by the entities involved? Were there adequate reserves with effective distribution? Were planned outages effectively coordinated?</p>	<ul style="list-style-type: none"> <li>Work with regional councils, RTOs, and operating entities to obtain and manage transient and dynamic models for simulations.</li> <li>Identify who will conduct transient and dynamic simulations and if external contractor(s) are required.</li> <li>Conduct transient and dynamic simulations at each of the precursor study times.</li> <li>Assess the stability of the system at each of these times and identify any latent reliability issues prior to blackout initiation.</li> <li>Consider creating a visual map of system conditions.</li> <li>Document the limitations and assumptions of simulations affecting the certainty of the simulation results.</li> </ul>		
<b>Blackout Sequence of Events</b>			
<p>6. What was the sequence of system events leading to and directly triggering the blackout?</p>	<ul style="list-style-type: none"> <li>Evaluate data logs and disturbance recorder data to establish a detailed sequence of events that initiated the blackout.</li> <li>Identify the sequence of events that directly led to the blackout.</li> <li>Review and reconcile these trigger events with regional council, RTO, and operating entity analyses.</li> </ul>		
<p>7. What was the sequence of system events during the blackout?</p>	<ul style="list-style-type: none"> <li>Evaluate logs and disturbance recorder data to establish sequence during the blackout. (The blackout sequence may follow multiple tracks.)</li> <li>Review and reconcile this sequence with those constructed by regional councils, RTOs, and operating entities.</li> <li>Consider developing 3-D, time-lapse visualization of the blackout (U. of Minnesota and/or U. of Wisconsin).</li> </ul>		
<p>8. What was the cause of the blackout in terms of electrical conditions and events? Generally describe any system breakups, islanding, etc. Were there conditions of voltage or frequency collapse, or unstable oscillations? Was the sequence strictly a sequential “domino” effect of facility trips? What were the system conditions (snapshots) at key points during the blackout?</p>	<ul style="list-style-type: none"> <li>Assess triggering sequence and blackout sequence to establish the causes for the blackout in terms of electrical conditions and events.</li> <li>Select key points in sequence for simulation that are relevant for study and that can be accurately modeled. (It may not be possible to reconcile data sufficiently to recreate system conditions during the blackout.)</li> <li>To the extent possible, conduct simulations and assess results at each point during the blackout.</li> <li>Review and reconcile results with regions and operating entities.</li> </ul>		
<p>9. Why did the blackout extend as far as it did? What arrested the</p>	<ul style="list-style-type: none"> <li>Using Eigenvalue or other advanced analysis techniques, assess why the blackout was</li> </ul>		

<b>Investigation Objective</b>	<b>Investigation and Analysis Approach</b>	<b>Schedule</b>	<b>Status</b>
blackout from extending further into other systems?	arrested along the lines it was.		
10. How did affected non-nuclear generators respond during the disturbance? Were trips as expected and required by procedures and standards? Did non-nuclear generators remain connected and support the power system in the manner they should have? Did any generator actions contribute to the blackout?	<ul style="list-style-type: none"> <li>• Prepare a table of affected generators and actions they made leading up to and during the blackout, including time-stamped unit trips, relays initiating unit trips, MW and MVar outputs, voltages, and frequency, etc.</li> <li>• Analyze the automatic (including relay trips) and operator-initiated actions of non-nuclear generators to determine whether actions were correct under the conditions or not.</li> <li>• Reconcile non-nuclear generator data and analysis with that of the regional councils, RTOs, and operating entities.</li> </ul>		
11. How did nuclear generators respond leading up to and during the blackout? Were trips as expected and required by procedures and standards? Were there any nuclear safety issues identified?	<ul style="list-style-type: none"> <li>• Work with NRC to develop a table of sequence of actions and issues regarding affected nuclear generators (both ones that tripped and those that did not).</li> <li>• Refer nuclear issues to NRC for analysis.</li> </ul>		
12. What was the sequence and amount of load lost? What directly caused load loss (e.g. under-frequency load shed, loss of transmission source, voltage collapse, relay actions, under/over frequency protection or stalls, etc.)	<ul style="list-style-type: none"> <li>• Work with regional councils, RTOs, and operating entities to develop a description of load lost/impacted, by area.</li> <li>• Analyze and report the cause for load loss in each area.</li> </ul>		
13. How did system protection and automated controls operate during the disturbance? Did they operate correctly or not?	<ul style="list-style-type: none"> <li>• Assess each automatic trip of a transmission facility for proper or improper relay actions.</li> <li>• Assemble and review region and operating entity reviews of logs, disturbance reports, and relay targets/logs and reconcile with NERC data.</li> </ul>		
14. Was any equipment damaged during the disturbance?	<ul style="list-style-type: none"> <li>• Request information from regions and companies on equipment damage.</li> <li>• Assess any transmission or generation facilities sustaining damage during the blackout, and extent of damage.</li> </ul>		
15. Did SCADA/EMS and data communications systems operate correctly during the disturbance? What problems were noted?	<ul style="list-style-type: none"> <li>• Request information from regions and companies.</li> <li>• Identify and analyze any problems with SCADA/EMS and data communications at regional and company levels.</li> </ul>		
<b>Reliability Standards/Procedures</b>	<ul style="list-style-type: none"> <li>•</li> </ul>		
16. What NERC reliability standards were applicable to the disturbance? What violations occurred? Were NERC standards and policies sufficient?	<ul style="list-style-type: none"> <li>• Compliance staff review NERC standards relevant to disturbance and perform a compliance review.</li> </ul>		
17. What regional council	<ul style="list-style-type: none"> <li>• Request regions to review applicable standards</li> </ul>		



<b>Investigation Objective</b>	<b>Investigation and Analysis Approach</b>	<b>Schedule</b>	<b>Status</b>
reliability standards were applicable to the disturbance? What violations occurred? Were regional standards and policies sufficient?	and report compliance with those standards during disturbance.		
18. Were any special operating procedures or other operating guidelines in effect and being observed leading up to the disturbance? Were these procedures sufficient?	<ul style="list-style-type: none"> <li>Review and analyze loop flow procedures with involved regions and companies, and report analysis results.</li> </ul>		
19. What other RTO, TO, CA procedures were applicable? What violations occurred? Were the procedures sufficient?	<ul style="list-style-type: none"> <li>Request regions to review applicable standards and compliance with existing reliability procedures and standards during disturbance, and report results.</li> </ul>		
<b>Maintenance</b>	<ul style="list-style-type: none"> <li></li> </ul>		
20. Are there any indications that maintenance of transmission or generation facilities may have contributed to the disturbance?	<ul style="list-style-type: none"> <li>Assess whether equipment or maintenance issues (e.g. tree trimming) contributed to the blackout and investigate specifics in areas of concern.</li> <li>Review regional assessments of maintenance issues that may have contributed to the outage.</li> </ul>		
<b>Personnel, Procedures, and Communications</b>	<ul style="list-style-type: none"> <li></li> </ul>		
21. What conditions were operators and reliability coordinators aware of leading up to and during the disturbance? What information did they have to warn them of unsafe system conditions? What problems or concerns did they have? What did they observe during the event? Were human errors made that contributed to the blackout? If there were, what were the causes of the errors?	<ul style="list-style-type: none"> <li>Develop an interview guide to address procedural and operational issues.</li> <li>Conduct onsite interviews with operating personnel and reliability coordinators involved.</li> <li>Analyze interview data to corroborate with technical data and report conclusions.</li> </ul>		
22. Were lines of authority clearly understood and respected in the time leading up to and during the blackout, as well as during the restoration period?	<ul style="list-style-type: none"> <li>Identify critical instructions given and evaluate results.</li> <li>Review documentation and effectiveness of assignments of operating and reliability authorities.</li> </ul>		
23. What communications occurred among operating entities?	<ul style="list-style-type: none"> <li>Review voice communications logs.</li> <li>Evaluate logs relevant to the blackout and identify key interactions. Report conclusions.</li> </ul>		
24. What were the qualifications (including certification status) and training of all operating personnel involved in the incident and their supervisors?	<ul style="list-style-type: none"> <li>Request certification status of all operating personnel from involved operating entities.</li> <li>Conduct onsite review of training materials and records.</li> <li>Conduct onsite review of operating procedures and tools</li> </ul>		
25. Was the role and performance of the reliability coordinators as expected?	<ul style="list-style-type: none"> <li>Review the adequacy of reliability plans for the affected regions.</li> <li>Review the actions of the affected reliability</li> </ul>		

Investigation Objective	Investigation and Analysis Approach	Schedule	Status
	coordinators to determine if they performed according to plans. <ul style="list-style-type: none"> <li>• Assess whether inter-area communications were effective, both at the control area and reliability coordinator levels.</li> </ul>		
<b>System Restoration</b>	<ul style="list-style-type: none"> <li>•</li> </ul>		
26. Were black start and restoration procedures available and adequate in each area? Were they followed and were they adequate to the restoration task? Were pre-defined authorities respected during the restoration?	<ul style="list-style-type: none"> <li>• Onsite audit of blackstart and restoration procedures and plans.</li> <li>• Analyze whether the plans and procedures were used and whether they were sufficient for this outage.</li> </ul>		
27. What issues were encountered in the restoration that created unexpected challenges or delays? What lessons were learned in the restoration (both things that went well and things that did not).	<ul style="list-style-type: none"> <li>• Solicit information from operating entities and regions regarding unexpected challenges and delays in restoration, and lessons learned.</li> <li>• Analyze what worked well and what did not in the restoration.</li> </ul>		
<b>System Planning and Design</b>	<ul style="list-style-type: none"> <li>•</li> </ul>		
28. Were the conditions leading up to the disturbance within the design and planning criteria for the transmission systems involved?	<ul style="list-style-type: none"> <li>• Request transmission owners and regions involved to report any violations of design or planning criteria prior to or leading up to the blackout.</li> </ul>		
<b>Conclusions and Recommendations</b>	<ul style="list-style-type: none"> <li>•</li> </ul>		
29. From a technical perspective, what are the root causes of this blackout? What additional technical factors contributed to making the blackout possible?	<ul style="list-style-type: none"> <li>• Conduct a root cause analysis on the findings and data. Categorize results as “root cause” or “contributing factor”. Focus on technical aspects.</li> </ul>		
30. What are the significant findings and lessons learned resulting from the investigation regarding technical failures leading to the blackout? What actions are recommended to avoid future blackouts and improve bulk electric system reliability? What issues may be inconclusive and require future investigation?	<ul style="list-style-type: none"> <li>• Draft report of significant findings, lessons learned, and recommendations.</li> </ul>		
31. Final Report	<ul style="list-style-type: none"> <li>• Prepare and coordinate publication of final report.</li> </ul>		

## Guidelines for NERC Reports on Blackouts and Disturbances<sup>10</sup>

### Introduction and Purpose

### Executive Summary of Blackout or Disturbance

### Conclusions & Recommendations

### Actions to Minimize the Possibility of Future Blackouts and Disturbances

### Detailed Analysis of Disturbance

#### 1. Sequence of Events

- 1.1. Sequence of transmission and generation events
  - 1.1.1. Reasons for each trip
  - 1.1.2. Sequence of loss of load
  - 1.1.3. Description of cascading and islanding

#### 2. System Modeling

- 2.1. Model and assumptions
  - 2.1.1. Equipment ratings and limits
  - 2.1.2. Steady state, system dynamics, and other analyses
  - 2.1.3. Degree of simulation success
  - 2.1.4. Simulation results
  - 2.1.5. Conclusions and lessons learned
- 2.2. Pre-disturbance Conditions
  - 2.2.1. Load levels
    - 2.2.1.1. Forecast vs. Actual
    - 2.2.1.2. Comparison with planning and operational models
  - 2.2.2. Generation dispatch
    - 2.2.2.1. Forecast vs. actual
    - 2.2.2.2. Comparison with day ahead studies
    - 2.2.2.3. Reporting of scheduled and forced outages
  - 2.2.3. Reserve capacity
    - 2.2.3.1. Location of MW reserves
    - 2.2.3.2. Planned vs. actual
  - 2.2.4. Transmission configurations
    - 2.2.4.1. Planned vs. actual
    - 2.2.4.2. Comparison with day ahead studies
    - 2.2.4.3. Reporting of scheduled and forced outages
  - 2.2.5. Interregional transactions
    - 2.2.5.1. Calculated transfer limits

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<sup>10</sup> Each blackout or disturbance is unique and will therefore demand a customized approach to its investigation and reporting. These guidelines for NERC reports are suggestive rather than definitive. Not all investigations and reports will require covering all of these topics.

- 2.2.5.2. Basis for limits – thermal, voltage, and stability
- 2.2.5.3. Seasonal assessments – Assumptions vs. actual
- 2.2.5.4. Actual schedules vs. Tagged schedules
  - 2.2.5.4.1. AIE Survey
  - 2.2.5.4.2. Tag Survey
- 2.2.6. System voltages (profile) and reactive supplies
  - 2.2.6.1. Coordination of reactive supplies and voltage schedules
  - 2.2.6.2. Reactive supply with power transfers
- 2.3. Disturbance Events
  - 2.3.1. System voltages (profile) and reactive supplies
  - 2.3.2. Power flows and equipment loadings
  - 2.3.3. System dynamic effects
- 3. Transmission system performance**
  - 3.1. Equipment ratings
  - 3.2. Protective relay actions
  - 3.3. Equipment maintenance
  - 3.4. Equipment damage
- 4. Generator performance**
  - 4.1. Generator control actions
  - 4.2. Generator protection
    - 4.2.1. Underfrequency
    - 4.2.2. Overspeed
    - 4.2.3. Excitation systems
    - 4.2.4. Other systems
  - 4.3. Equipment maintenance
  - 4.4. Equipment protection
  - 4.5. Dynamic effects of generators
- 5. System frequency**
  - 5.1. Frequency excursions – pre disturbance
    - 5.1.1. Analysis of frequency anomalies
    - 5.1.2. Effect of time error correction
  - 5.2. Frequency analysis – Disturbance
    - 5.2.1. Remaining interconnection
    - 5.2.2. Islands remaining
- 6. Operations**
  - 6.1. Operational visibility and actions
    - 6.1.1. Reliability Coordinators
      - 6.1.1.1. Delegation and authority
      - 6.1.1.2. Monitoring capabilities
        - 6.1.1.2.1. Scope of coverage and system visibility
        - 6.1.1.2.2. Monitoring tools
        - 6.1.1.2.3. Data availability and use
      - 6.1.1.3. Operations planning capability
        - 6.1.1.3.1. Operational planning tools

- 6.1.1.3.2. Coordination
- 6.1.1.4. Operating procedures
  - 6.1.1.4.1. Emergency operations
  - 6.1.1.4.2. Loss of monitoring system or components
  - 6.1.1.4.3. Communication procedures
- 6.1.1.5. Operating qualifications and training
  - 6.1.1.5.1. Qualification of operators
  - 6.1.1.5.2. Training provided
  - 6.1.1.5.3. Simulation of emergencies
- 6.1.2. Transmission Operators
  - 6.1.2.1. Authority to take action
  - 6.1.2.2. Monitoring capabilities
    - 6.1.2.2.1. Scope of coverage and system visibility
    - 6.1.2.2.2. Monitoring tools
    - 6.1.2.2.3. Data availability and use
  - 6.1.2.3. Operations planning capability
    - 6.1.2.3.1. Operational planning tools
    - 6.1.2.3.2. Coordination
  - 6.1.2.4. Operating procedures
    - 6.1.2.4.1. Emergency operations
    - 6.1.2.4.2. Loss of monitoring system or components
    - 6.1.2.4.3. Communication procedures
  - 6.1.2.5. Operating qualifications and training
    - 6.1.2.5.1. Qualification of operators
    - 6.1.2.5.2. Training provided
    - 6.1.2.5.3. Simulation of emergencies

## **7. System Planning and Design**

- 7.1. Establishing operating limits
  - 7.1.1. Responsibility for setting limits
  - 7.1.2. ATC and TTC calculations
  - 7.1.3. Planning studies
    - 7.1.3.1. Wide-area simultaneous transfer limits
      - 7.1.3.1.1. Determination of limits
      - 7.1.3.1.2. Monitoring of limits
      - 7.1.3.1.3. Basis for limits – thermal, voltage, and stability
      - 7.1.3.1.4. Regional assessments
      - 7.1.3.1.5. Other system studies in affected areas
    - 7.1.3.2. Reactive planning
      - 7.1.3.2.1. Reactive reserve planning
      - 7.1.3.2.2. Active vs. static resources
      - 7.1.3.2.3. Voltage stability analysis
    - 7.1.3.3. Regional criteria and/or NERC standards used for planning
      - 7.1.3.3.1. Compliance to these planning criteria and/or standards

## **8. Reliability Standards and Compliance**

- 8.1. Audits
  - 8.1.1. Reliability Coordinators
    - 8.1.1.1. Previous audits and results

- 8.1.1.1.1. Compliance with NERC standards
- 8.1.1.2. Updated findings based on investigation
- 8.1.1.3. Post blackout audit results and findings
- 8.1.1.4. Recommendations for future audits
- 8.1.2. Balancing Authorities
  - 8.1.2.1. Regional audits
    - 8.1.2.1.1. Compliance with NERC and regional standards
  - 8.1.2.2. Updated findings based on investigation
  - 8.1.2.3. Post blackout audit results and findings
  - 8.1.2.4. Recommendations for future audits
- 8.2. Regional criteria and/or NERC Reliability Standards used for operations
  - 8.2.1. Compliance to these operating criteria and/or standards
- 8.3. Reliability Standards
  - 8.3.1. Improvements needed
  - 8.3.2. Potential new standards

## **9. Actions to Minimize the Possibility of Future Widespread Disturbances**

- 9.1. Reliability Standards and Compliance to Standards
- 9.2. Availability of Planned Facilities as Scheduled
- 9.3. Automatic Load Shedding Programs
- 9.4. Controlled Separation and Islanding
- 9.5. Improved Data Collection and System Monitoring
- 9.6. Studies of Impacts of Severe Disturbances

## **10. Restoration of Service**

- 10.1. Restoration Procedures
  - 10.1.1. RTOs and ISOs
  - 10.1.2. Transmission operators
  - 10.1.3. Generator operators
  - 10.1.4. Distribution providers
- 10.2. Restoring service
  - 10.2.1. Transmission Line Restoration
    - 10.2.1.1. Within control area/ISO/RTO
    - 10.2.1.2. Interarea tie lines
    - 10.2.1.3. Impediments and other issues
  - 10.2.2. Generation Restoration
    - 10.2.2.1. Utility-owned generation
    - 10.2.2.2. Independent generation
    - 10.2.2.3. Fuel supply adequacy
    - 10.2.2.4. Fossil units
    - 10.2.2.5. Nuclear units
    - 10.2.2.6. Capacity reserves
    - 10.2.2.7. Coordination with transmission
    - 10.2.2.8. Coordination with load and other generation
    - 10.2.2.9. Impediments and other issues
  - 10.2.3. Coordination and Communications
    - 10.2.3.1. Within control area/ISO/RTO
    - 10.2.3.2. With outside control areas/ISOs/RTOs

- 10.2.3.3. Wide-area coverage
- 10.2.3.4. Impediments and other issues
- 10.3. Review of Restoration Procedures
  - 10.3.1. Time to restore customers
  - 10.3.2. Need for modifications
  - 10.3.3. Availability of procedures to necessary participants
  - 10.3.4. Need for training and practice drills
  - 10.3.5. Comparison with other control areas/ISOs/RTOs

## **11. Investigation Process**

- 11.1. Description of process
  - 11.1.1. Organization
  - 11.1.2. Coordination with US-Canada Task force
  - 11.1.3. Coordination with Regions/RTO's
  - 11.1.4. Recommended process improvements
    - 11.1.4.1. Use for other events – near misses, etc.
- 11.2. Data Management
  - 11.2.1. Data collection processes
    - 11.2.1.1. Data request process
    - 11.2.1.2. Data forms used
  - 11.2.2. Data received
    - 11.2.2.1. Quality and usefulness of data
  - 11.2.3. Data warehousing
    - 11.2.3.1. Data warehouse structure
    - 11.2.3.2. Accessibility of data
  - 11.2.4. Data forms and process for future investigations

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**DELEGATION AGREEMENT BETWEEN  
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION  
AND [REGIONAL ENTITY]**

DELEGATION AGREEMENT (“Agreement”) made this \_\_\_ day of \_\_\_\_\_ 2006, between the North American Electric Reliability Corporation (“NERC”), an organization certified by the Federal Energy Regulatory Commission (“Commission”) pursuant to Section 215(c) of the Federal Power Act to establish and enforce Reliability Standards for the bulk power system, and the [REGIONAL ENTITY], an organization established to develop and enforce Reliability Standards within the geographic boundaries identified on **Exhibit A** to this Agreement, and for other purposes. NERC and [REGIONAL ENTITY] may be individually referred to herein as “Party” or collectively as “Parties.”

**WITNESSETH**

**WHEREAS**, Subtitle A of the Electricity Modernization Act of 2005 added Section 215 to the Federal Power Act (16 U.S.C. § 824n) (hereafter “the Act”) and, among other things, provides for the establishment of an electric reliability organization (“ERO”) to develop and enforce Reliability Standards applicable to all owners, operators, and users of the bulk power system;

**WHEREAS**, the Commission has adopted regulations for the implementation of the Act set forth at Chapter I, Title 18, Code of Federal Regulations, Part 39, as adopted by Commission Order No. 672 in Docket No. RM05-30-000 on February 3, 2006; (114 FERC ¶ 61, 104; hereafter “Order 672”);

**WHEREAS**, the Commission has certified NERC as the ERO that will, in accordance with the Act, establish and enforce Reliability Standards for the bulk power system, subject to certain delegation provisions described below;



**WHEREAS**, the Act recognizes the international interdependency of electric reliability within North America and envisions the ERO and such applicable Regional Entities as international organizations;

**WHEREAS**, the Act and Section 39.8 of the Commission’s regulations provide for the delegation by the electric reliability organization of authority to propose and enforce Reliability Standards to regional entities such as [REGIONAL ENTITY] provided that:

(A) The regional entity is governed by —

- (i) an independent board;
- (ii) a balanced stakeholder board; or
- (iii) a combination independent and balanced stakeholder board.

(B) The regional entity otherwise satisfies the provisions of Section 215(c)(1) and (2) of the Act; and

(C) The agreement promotes effective and efficient administration of bulk power system reliability;

**WHEREAS**, certain regional entities are organized on an Interconnection-wide basis and are therefore entitled to the presumption set forth in the Act that: “[t]he ERO and the Commission shall rebuttably presume that a proposal for delegation to a regional entity organized on an Interconnection-wide basis promotes effective and efficient administration of bulk power system reliability and should be approved”;

**WHEREAS**, the Act further provides that the ERO shall rebuttably presume that a proposal from a Regional Entity organized on an Interconnection-wide basis for a Reliability Standard or modification to a Reliability Standard to be applicable on an Interconnection-wide basis is just, reasonable, and not unduly discriminatory or preferential, and in the public interest;

**WHEREAS**, [REGIONAL ENTITY] [is/is not] organized on an Interconnection-wide basis and therefore [is/is not] entitled to the rebuttable presumptions accorded such an entity;

**WHEREAS**, NERC will work through [REGIONAL ENTITY] to carry out certain of its activities in furtherance of its responsibilities as the electric reliability organization under the Act; and

**WHEREAS**, NERC has concluded that [REGIONAL ENTITY] meets all requirements of the Act, the Commission's regulations, and the NERC Rules of Procedure as approved by the Commission ("NERC Rules") necessary to qualify for delegation;

**NOW, THEREFORE**, in consideration of the mutual covenants and agreements herein contained, NERC and [REGIONAL ENTITY], agree as follows:

**1. Definitions.** The capitalized terms used in this Agreement shall be defined as set forth in the Act, the Commission's regulations, or the NERC Rules or, if not so defined, shall be defined as follows:

(a) Breach means (i) the failure of a Party to perform or observe any material term, condition or covenant of the Agreement or (ii) a representation in Section 2 of the Agreement shall have become materially untrue.

(b) Confidential Information as used herein, shall mean all information that the Parties share or receive for the purpose of conducting activities under the Agreement, whether printed, written, oral, or electronic (in any format) that, whether in written or electronic form, is marked as confidential or, if disclosed orally, is identified as confidential at the time of disclosure and then is promptly confirmed in writing or electronically to the recipient as confidential. Confidential Information includes, but is not limited to, non-price information involving power and transmission systems planning and operation, power sales and transfers, transmission transactions, and critical energy infrastructure information. Confidential Information shall not include information that, at no fault of the recipient Party, is or was: (1) in the public domain or generally available or known to the public; (2) disclosed to a recipient by a third party who had a legal right to do so; or (3) independently developed by a Party or known to such Party prior to its disclosure hereunder.

(c) Cross-Border Regional Entity means a Regional Entity for which the size and scope includes a portion of Canada or Mexico.

(d) Delegated Authority means the authority delegated by NERC to [REGIONAL ENTITY] to propose and enforce Reliability Standards pursuant to the Act.

(e) [REGIONAL ENTITY] Rules means the bylaws, rules of procedure, and other organizational rules and protocols of [REGIONAL ENTITY].

(f) Reliability Standard means a requirement approved by the Commission under Section 215 of the Act to provide for reliable operation of the bulk power system, including without limiting the foregoing requirements for the operation of existing bulk power system facilities, including cyber security protection, and including the design of planned additions or modifications to such facilities to the extent necessary for reliable operation of the bulk power system; but shall not include any requirement to enlarge bulk power system facilities or to construct new transmission capacity or generation capacity.

(g) Regional Variance means an aspect of a Reliability Standard that applies only within a particular Regional Entity or group of Regional Entities. A Regional Variance may be used to qualify how a particular Regional Entity or Regional Entities achieves the objectives of a Reliability Standard or may establish different measures or performance criteria as necessary to achieve reliability within the particular Regional Entity or group of Regional Entities. A Regional Variance may not be inconsistent with any Reliability Standard as it would otherwise exist without the Regional Variance. Such a Regional Variance may be proposed by a Regional Entity and, if adopted by NERC and approved by the Commission, shall be enforced within the applicable Regional Entity or Regional Entities pursuant to delegated authority.

(h) Regional Reliability Standard means a type of Reliability Standard that is applicable only within a particular Regional Entity or group of Regional Entities. A Regional Reliability Standard may augment, add detail to, or implement another Reliability Standard or cover matters not addressed by other Reliability Standards. Regional Reliability Standards, upon adoption by NERC and approval by the Commission, shall be Reliability Standards and shall be enforced within the applicable Regional Entity or Regional Entities pursuant to delegated authorities.

## **2. Representations.**

(a) For purposes of its Delegated Authority, [REGIONAL ENTITY] hereby represents and warrants to NERC that:

(i) [REGIONAL ENTITY] is and shall remain during the term of this Agreement validly existing and in good standing pursuant all applicable laws relevant to this Agreement and that no applicable law, contract or other legal obligation prevents it from executing this Agreement and fulfilling its obligations hereunder. [REGIONAL ENTITY] is governed in accordance with its bylaws by [*select appropriate: an independent board/a balanced stakeholder board/ a combination independent balanced stakeholder board*]. Pursuant to these bylaws, no two industry sectors can control any [REGIONAL ENTITY] decision and no single segment may veto any [REGIONAL ENTITY] decision. Such bylaws are attached hereto as **Exhibit B**<sup>1</sup>, and as so attached are in full force and effect. No other such corporate governance documents are binding upon [REGIONAL ENTITY].

(ii) As set forth in **Exhibit C** hereto<sup>2</sup>, [REGIONAL ENTITY] has developed a standards development procedure, which provides the process that [REGIONAL ENTITY] may use to develop Regional Reliability Standards [and Regional Variances][if the regional entity is organized on an Interconnection-wide basis] that are proposed to NERC for adoption.

(iii) As set forth in **Exhibit D** hereto<sup>3</sup>, [REGIONAL ENTITY] has developed a regional compliance enforcement program, which provides for the enforcement of Reliability Standards in order to ensure Reliable Operation of the bulk power system within its geographic boundaries.

(b) NERC hereby represents and warrants to [REGIONAL ENTITY] that:

(i) It is and shall remain during the term of this Agreement validly existing and in good standing pursuant all applicable laws relevant to this Agreement and that no applicable law, contract or other legal obligation prevents it from executing this Agreement and fulfilling its obligations hereunder; and

(ii) It has been certified as the ERO by the Commission pursuant to the Act.

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<sup>1</sup> The **Exhibit B** from each Regional Entity shall meet the requirements contained in **Exhibit B** to this pro forma Agreement.

<sup>2</sup> The **Exhibit C** from each Regional Entity shall meet the requirements contained in **Exhibit C** to this pro forma Agreement.

<sup>3</sup> The **Exhibit D** from each Regional Entity shall meet the requirements contained in **Exhibit D** to this pro forma Agreement.

### 3. Covenants.

(a) During the term of this Agreement, [REGIONAL ENTITY] shall maintain and preserve its qualifications for delegation pursuant to the Act and shall not amend the [REGIONAL ENTITY] Rules without NERC's approval, which shall not be unreasonably withheld or delayed and which shall, in the case of a Regional Entity organized on an Interconnection-wide basis, be governed by the presumptions provided for in Section 215(d)(2) and (e)(4)(C) of the Act, and subject to any required Commission approval.

(b) During the term of this agreement, NERC shall maintain its qualification and status as the ERO pursuant to the Act and, subject to the provisions of Sections 16 and 17 of this Agreement, NERC shall not adopt amendments to the NERC Rules that affect the rights, obligations or programs of [REGIONAL ENTITY] under this Agreement without first obtaining the consent of [REGIONAL ENTITY], which consent shall not be unreasonably withheld or delayed.

### 4. Delegation of Authority.

(a) Based upon the representations, warranties and covenants of [REGIONAL ENTITY] in Sections 2 and 3 above, the corporate governance documents set forth in **Exhibit B**, the standards development process set forth in **Exhibit C**, and the regional compliance enforcement program set forth in **Exhibit D**, NERC hereby delegates authority, pursuant to Section 215(e)(4) of the Act to [REGIONAL ENTITY] for the purpose of proposing Reliability Standards to NERC, as set forth in Section 5 of this Agreement, and enforcing Reliability Standards, as set forth in Section 6 of this Agreement within the geographic boundaries set forth on **Exhibit A**. No further redelegation of authority or responsibility, in total or in part, under this Agreement is allowed without NERC's express consent.

(b) For Cross-Border Regional Entities, the authority delegated by this Agreement shall extend only to the portion of the region identified on **Exhibit A** that is within the United States. Any delegation of authority by Canadian or Mexican authorities to [REGIONAL ENTITY] shall be governed by a separate agreement and is outside the scope of this Agreement; provided, however, that both [REGIONAL ENTITY] and NERC shall endeavor to ensure that this Agreement and any delegation by Canadian or Mexican authorities are compatible.

**5. Reliability Standards.**

(a) In connection with its Delegated Authority, [REGIONAL ENTITY] shall be entitled to:

(i) propose Reliability Standards, Regional Variances, or modifications thereof to NERC, which shall be considered by NERC through an open and inclusive process for proposing and adopting Reliability Standards that affords [REGIONAL ENTITY] reasonable notice and opportunity to be heard; and

(ii) develop Regional Reliability Standards [and Regional Variances][if Regional Entity is organized on an Interconnection-wide basis] through [REGIONAL ENTITY]'s process as set forth in **Exhibit C**. Proposals approved through [REGIONAL ENTITY]'s process shall be reviewed by the NERC Board of Trustees after NERC provides notice and an opportunity for interested persons to comment. In the case of a proposal from a Regional Entity organized on an Interconnection-wide basis, comments shall be limited to the factors identified in NERC Rule 313, section 3.1 as it may be amended from time to time. The NERC board of trustees shall promptly thereafter consider such proposed Regional Reliability Standard or Regional Variance, applying the rebuttable presumption described in subsection 5(b) if the proposed Regional Reliability Standard or Regional Variance is from a Regional Entity organized on an Interconnection-wide basis, and either approve the proposed standard and submit it to the Commission for approval, or disapprove it in writing setting forth its reasons. [REGIONAL ENTITY] may appeal any disapproval of a proposed Regional Reliability Standard or Regional Variance to the Commission.

(b) Pursuant to Section 215(d)(3) of the Act, NERC shall rebuttably presume that a proposal from a Regional Entity organized on an Interconnection-wide basis for a Regional Reliability Standard or Regional Variance or modification thereof to be applicable on an Interconnection-wide basis is just, reasonable, and not unduly discriminatory or preferential, and in the public interest. Any person challenging such proposal from the [INTERCONNECTION-WIDE REGIONAL ENTITY] shall have the burden of proof. NERC shall not find that this presumption has been rebutted except based upon substantial evidence that has been disclosed to, and been subject to comment by, the [INTERCONNECTION-WIDE REGIONAL ENTITY] during NERC's review of the proposal.

**6. Enforcement.**

(a) In connection with its delegated authority pursuant to this Agreement, [REGIONAL ENTITY] shall enforce Reliability Standards (including Regional Reliability Standards and Regional Variances) within the geographic boundaries set forth in **Exhibit A** through the compliance enforcement program set forth in **Exhibit D**. NERC and [REGIONAL ENTITY] agree that this program meets all applicable requirements of the Act, Order 672 and the Commission's regulations, including, *inter alia*, the requirement for an audit program pursuant to Section 39.7(a) of the Commission's regulations, the assessment of penalties pursuant to Section 39.7(c) through 39.7(g) of the Commission's regulations and the requirements for due process. [REGIONAL ENTITY] may not materially change its compliance enforcement program absent NERC's approval, which shall not be unreasonably withheld or delayed. Subject to the rights and limitations of Sections 16 and 17 of this Agreement, [REGIONAL ENTITY] agrees to comply with the NERC Rules in implementing this program.

(b) [REGIONAL ENTITY] shall report promptly to NERC any self-reported violation or investigation of a violation or an alleged violation of a Reliability Standard and its eventual disposition. Such report shall include the owner's, operator's, or user's name, which Reliability Standard or Reliability Standards were violated or allegedly violated, when the violation or alleged violation occurred, other pertinent facts about the violation including circumstances surrounding the violation with any known risk to the bulk power system, when the violation was or will be mitigated, the name of a person knowledgeable about the violation or alleged violation to serve as a point of contact with the Commission, and any other information required by NERC compliance program procedures. NERC shall promptly forward such report to the Commission. NERC and [REGIONAL ENTITY] shall cooperate in filing such periodic summary reports as the Commission shall from time to time direct on violations of Reliability Standards and summary analyses of such violations.

(c) Each violation or alleged violation shall be treated as nonpublic until the matter is filed with the Commission as a notice of penalty or resolved by an admission that the owner, operator, or user of the bulk power system violated a Reliability Standard or by a settlement or other negotiated disposition. The disposition of each violation or alleged violation that relates to

a Cybersecurity Incident or that would jeopardize the security of the bulk power system if publicly disclosed shall be nonpublic unless the Commission directs otherwise.

(d) All appeals of penalties imposed by [REGIONAL ENTITY] shall be filed with NERC, in accordance with the NERC Rules.

(e) [REGIONAL ENTITY] shall maintain the capability to conduct investigations of potential violations of Reliability Standards and to conduct such investigations in a confidential manner.

(f) [REGIONAL ENTITY] shall maintain a program of proactive enforcement audits including procedures for spot-checks of self-reported compliance and periodic audits of all responsible entities as defined in **Exhibit D**.

(g) As part of its compliance enforcement program, [REGIONAL ENTITY] shall maintain a conflict of interest policy that assures the integrity of such program and the independence of the compliance program staff from those subject to enforcement actions.

(h) As often as NERC deems necessary, but no less than every three years, NERC shall review [REGIONAL ENTITY]'s compliance enforcement program to ensure that: (i) the program meets all applicable legal requirements; (ii) actual practices reflect the requirements; and (iii) the program administered pursuant to the Delegated Authority promotes consistent interpretations across North America of Reliability Standards and comparable levels of sanctions and penalties to violations of Reliability Standards constituting comparable levels of threat to reliability of the bulk power system.

(i) [REGIONAL ENTITY] shall modify its compliance enforcement program as needed to reflect additions to, deletions from, or modifications of Reliability Standards and, subject to the rights and limitations of Sections 16 and 17 of this Agreement, shall modify its compliance enforcement program as needed: (i) to reflect amendments to the NERC Rules; (ii) to comply with NERC directives resulting from the review of compliance enforcement programs as provided in Section 6(h) of this Agreement; or (iii) to resolve a conflict with a function, rule, order, tariff, rate schedule, or agreement accepted, approved, or ordered by the Commission.



(j) NERC shall conduct a review with the regional entities that provides for the exchange of information on practices, experiences, and lessons learned in the implementation of compliance enforcement programs.

**7. Delegation-Related Services.** NERC will engage [REGIONAL ENTITY] on its behalf to carry out certain of its activities that are in furtherance of its responsibilities as the ERO under the Act or in support of delegated functions, as specified in the NERC Rules and listed on **Exhibit E**.

**8. Funding.** [REGIONAL ENTITY] and NERC shall ensure that the delegated functions and related activities listed on **Exhibit E** have reasonable and adequate funding and resources by undertaking the following:

(a) NERC shall fund [REGIONAL ENTITY] activities necessary for [REGIONAL ENTITY] to carry out its Delegated Authority under this Agreement, including the functions listed on **Exhibit E**, and shall not impose any obligation or requirement regarding Delegated Authority upon [REGIONAL ENTITY] without providing appropriate funding to carry out such mandates;

(b) [REGIONAL ENTITY] and NERC agree that costs of carrying out [REGIONAL ENTITY]'s responsibilities under the Delegation Agreement will be equitably allocated among end users within the geographic boundaries described in **Exhibit A** and recovered through a formula based on net energy for load as set forth in **Exhibit E**;

(c) NERC will ensure that the costs for its responsibilities are first allocated fairly among the interconnections and regions according to the applicability of this work to those interconnections and regions, and then equitably among the end users of the applicable interconnections and regions as appropriate. Allocation on a net energy for load basis will be presumed to satisfy this equity requirement.

(d) NERC shall provide [REGIONAL ENTITY] with the form for budget submittal no later than April 30 of the prior year.

(e) [REGIONAL ENTITY] shall submit its annual budget for carrying out its Delegated Authority functions and related activities listed on **Exhibit E**, as well as all other [REGIONAL ENTITY] activities and funding to NERC no later than June 1 of the prior fiscal

year such that NERC may submit its budget to the Commission 130 days in advance of the beginning of each fiscal year. The [REGIONAL ENTITY] budget submission shall include supporting materials, including [REGIONAL ENTITY]'s complete business plan and organization chart, explaining the proposed collection of all dues, fees and charges, and the proposed expenditure of funds collected in sufficient detail to justify the requested funding collection and budget expenditures. NERC shall develop, in consultation with the Regional Entities, a reasonable and consistent system of accounts, with a level of detail and record keeping comparable to the Uniform System of Accounts and sufficient to allow the Commission to compare each Commission-approved NERC fiscal year budget with the actual results at the NERC and Regional Entity level. [REGIONAL ENTITY] shall follow NERC's prescribed system of accounts.

(f) [REGIONAL ENTITY]'s funding system shall include reasonable reserve funding for unforeseen and extraordinary expenses and other contingencies, consistent with generally accepted accounting principles.

(g) NERC shall review and approve [REGIONAL ENTITY]'s budget for adequacy in meeting its responsibilities under the Delegation Agreement and for reasonableness. NERC will presume [REGIONAL ENTITY]'s budget is reasonable if [REGIONAL ENTITY]'s governing body has approved the budget for submission to NERC but will not presume adequacy.

(h) [REGIONAL ENTITY] shall submit unaudited quarterly interim financial statements in form provided by NERC no later than 20 days after the end of the fiscal quarter (March 31, June 30, September 30, and December 31).

(i) [REGIONAL ENTITY] shall submit audited financial statements annually including supporting materials in a form provided by NERC no later than 150 days after the end of the fiscal year.

(j) NERC shall have the right to review from time to time, in reasonable intervals but no less than every three years, the financial records of [REGIONAL ENTITY] in order to ensure that the documentation fairly represents in all material respects appropriate funding under this Agreement.

(k) **Exhibit E** to this Agreement sets forth the mechanism through which [REGIONAL ENTITY] shall offset penalty monies it receives against its next year's annual budget for carrying out functions under this Agreement.

**9. Assignment.** This Agreement may be assigned by either Party only with the prior written consent of the other, which consent shall be granted or withheld in such non-assigning Party's sole discretion, subject to approval by the Commission. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. [REGIONAL ENTITY] may not delegate in whole or in part its Delegated Authority to any other entity; provided, however, that nothing in this provision shall prohibit [REGIONAL ENTITY] from contracting with other entities to assist it in carrying out its Delegated Authority provided [REGIONAL ENTITY] retains control and responsibility for such Delegated Authority.

**10. Default and Cure.** Upon a breach, the nonbreaching Party shall give written notice of such breach to the breaching Party (the "Default Notice"). Subject to a suspension of the following deadlines as specified below, the breaching Party shall have thirty (30) calendar days from receipt of the default notice within which to cure such breach; provided however, that if such breach is not capable of cure within thirty (30) calendar days, the breaching Party shall commence such cure within thirty (30) calendar days after notice and continuously and diligently complete such cure within ninety (90) calendar days from receipt of the default notice; and, if cured within such time, the breach specified in such notice shall cease to exist. Subject to the limitation specified in the following sentence, if a breach is not cured as provided in this article, or if a breach is not capable of being cured within the period provided for herein, the nonbreaching Party shall have the right to declare a default and terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder. The deadlines for cure and the right to declare a default and terminate this Agreement shall be suspended during the pendency of any efforts or proceedings in accordance with Section 17 of this Agreement to resolve a dispute as to whether a breach has occurred. The provisions of this article will survive termination of this Agreement.

**11. Term and Termination.**

(a) This Agreement shall become effective thirty (30) days after the date of issuance of a final Commission order approving this Agreement without requiring any changes to this Agreement unacceptable to either Party.

(b) The initial term of the Agreement shall be three (3) years, prior to which time NERC shall conduct an audit pursuant to subsections 6(e) and 7(i) to ensure that [REGIONAL ENTITY] continues to meet all applicable statutory and regulatory requirements necessary to maintain its eligibility for delegation. If [REGIONAL ENTITY] meets such requirements, this Agreement may be renewed for another five (5) year term. If this Agreement is not renewed or becomes subject to termination for any reason, the Parties shall work to ensure a transition of [REGIONAL ENTITY]'s Delegated Authority to NERC or to another eligible entity. The termination of this Agreement shall not take effect until such transition has been effected, unless the transition period exceeds 180 days at which time [REGIONAL ENTITY] may unilaterally terminate.

(c) If any provision of this Agreement, or the application thereof to any person, entity or circumstance, is held by a court or regulatory authority of competent jurisdiction to be invalid, void, or unenforceable, or if a modification or condition to this Agreement is imposed by a regulatory authority exercising jurisdiction over this Agreement, the Parties shall endeavor in good faith to negotiate such amendment or amendments to this Agreement as will restore the relative benefits and obligations of the signatories under this Agreement immediately prior to such holding, modification or condition. If either Party finds such holding, modification or condition unacceptable and the Parties are unable to renegotiate a mutually acceptable resolution, either Party may unilaterally terminate this Agreement upon thirty (30) days' notice to the other Party. Such termination shall be effective ninety (180) days following written notice by [REGIONAL ENTITY] to NERC and the Commission, or at such other time as may be mutually agreed by [REGIONAL ENTITY] and NERC.

(d) Notwithstanding any termination of this Agreement, provisions contained in Limitation of Liability (Section 12), No Third Party Beneficiaries (Section 13) and Confidentiality (Section 14) shall survive this Agreement in accordance with their terms until sixty (60) days following the expiration of any applicable statute of limitations.

**12. Limitation of Liability.** [REGIONAL ENTITY] and NERC agree not to sue each other or their directors, officers, employees, and persons serving on their committees and subgroups based on any act or omission of any of the foregoing in the performance of duties pursuant to this Agreement or in conducting activities under the authority of Section 215 of the Act, other than seeking a review of such action or inaction by the Commission. NERC and [REGIONAL ENTITY] shall not be liable to one another for any damages whatsoever, including without limitation, direct, indirect, incidental, special, multiple, consequential (including attorneys' fees and litigation costs), exemplary, or punitive damages arising out of or resulting from any act or omission associated with the performance of the [REGIONAL ENTITY]'s or NERC's responsibilities under this Agreement or in conducting activities under the authority of Section 215 of the Act, except to the extent that the [REGIONAL ENTITY] or NERC is found liable for gross negligence or intentional misconduct, in which case [REGIONAL ENTITY] or NERC shall not be liable for any indirect, incidental, special, multiple, consequential (including without limitation attorneys' fees and litigation costs), exemplary, or punitive damages.

**13. No Third Party Beneficiaries.** Nothing in this Agreement shall be construed to create any duty to, any standard of care with reference to or any liability to any third party.

**14. Confidentiality.** During the course of the Parties' performance under this Agreement, a Party may receive Confidential Information. Except as set forth herein, the Parties agree to keep in confidence and not to copy, disclose, or distribute any Confidential Information or any part thereof, without the prior written permission of the issuing Party, unless disclosure is required by subpoena, law, or other directive of a court, administrative agency, or arbitration panel, in which event the recipient hereby agrees to provide the Party that provided the Confidential Information with prompt notice of such request or requirement in order to enable such issuing Party to (a) seek an appropriate protective order or other remedy, (b) consult with the recipient with respect to taking steps to resist or narrow the scope of such request or legal process, or (c) waive compliance, in whole or in part, with the terms of this Section. In the event a protective order or other remedy is not obtained or that issuing Party waives compliance with the provisions, the recipient agrees to furnish only that portion of the Confidential Information which the recipient's counsel advises is legally required and to exercise best efforts

to obtain assurance that confidential treatment will be accorded to such Confidential Information. In addition, each Party shall ensure that its officers, trustees directors, employees, subcontractors and subcontractors' employees, and agents to whom Confidential Information is exposed are under obligations of confidentiality that are at least as restrictive as those contained herein. This confidentiality provision does not prohibit reporting and disclosure as directed by NERC, as set forth in Section 6 of this Agreement.

**15. Amendment.** Neither this Agreement nor any of the terms hereof, may be amended unless such amendment is made in writing, signed by the Parties, and filed with and approved by the Commission.

**16. Amendments to the NERC Rules.** NERC shall not adopt amendments to the NERC Rules that affect the rights, obligations, or programs of [REGIONAL ENTITY] under this Agreement without first obtaining the consent of [REGIONAL ENTITY], which consent shall not be unreasonably withheld or delayed. To the extent [REGIONAL ENTITY] does not consent, NERC shall have the right to invoke the dispute resolution provisions of Section 17 and, if such effort fails to resolve the dispute, to petition the Commission to adopt the amendment to the NERC Rules. To the extent that the Commission issues an order amending or materially affecting the rights or obligations of [REGIONAL ENTITY] under this Agreement, [REGIONAL ENTITY] shall have the option, exercisable no later than 60 days after issuance of such order, to terminate this Agreement. Such termination shall be effective 90 days following written notice by [REGIONAL ENTITY] to NERC and the Commission, or at such other time as may be mutually agreed by [REGIONAL ENTITY] and NERC.

**17. Dispute Resolution.** In the event a dispute arises under this Agreement between NERC and [REGIONAL ENTITY], representatives of the Parties with authority to settle the dispute shall meet and confer in good faith in an effort to resolve the dispute in a timely manner. If such effort fails, each Party shall have all rights to pursue all remedies, except as expressly limited by the terms of this Agreement. Neither Party shall have the right to pursue other remedies until the Dispute Resolution procedures of this Section 17 have been exhausted. This Section 17 shall not apply to enforcement actions against individual entities.

18. **Notice.** Whether expressly so stated or not, all notices, demands, requests, and other communications required or permitted by or provided for in this Agreement shall be given in writing to a Party at the address set forth below, or at such other address as a Party shall designate for itself in writing in accordance with this Section, and shall be delivered by hand or reputable overnight courier:

If to NERC:

If to [REGIONAL ENTITY]:

\_\_\_\_\_  
Attn:

Facsimile:

\_\_\_\_\_  
Attn:

Facsimile:

19. **Governing Law.** When not in conflict with or preempted by federal law, this Agreement will be governed by and construed in accordance with the laws of New Jersey without giving effect to the conflict of law principles thereof. The Parties recognize and agree not to contest the exclusive or primary jurisdiction of the Commission to interpret and apply this Agreement; provided however that if the Commission declines to exercise or is precluded from exercising jurisdiction of any action arising out of or concerning this Agreement, such action shall be brought in any state or federal court of competent jurisdiction in New Jersey. All Parties hereby consent to the jurisdiction of any state or federal court of competent jurisdiction in New Jersey for the purpose of hearing and determining any action not heard and determined by the Commission.

20. **Headings.** The headings and captions in this Agreement are for convenience of reference only and shall not define, limit, or otherwise affect any of the terms or provisions hereof.

21. **Savings Clause.** Nothing in this Agreement shall be construed to preempt or limit any authority that [REGIONAL ENTITY] may have to adopt reliability requirements or take other actions to ensure reliability of the bulk power system within the geographic boundaries described in **Exhibit A** that are outside the authority delegated from NERC, as long as such reliability requirements and actions are not inconsistent with Reliability Standards applicable to the region described in **Exhibit A** and do not result in a lessening of reliability outside the region described in **Exhibit A**.

**22. Entire Agreement.** This Agreement (a) constitutes the entire agreement, and supersedes all prior agreements and understandings, both written and oral, among the parties with respect to the subject matter of this Agreement.

**24. Execution of Counterparts.** This Agreement may be executed in counterparts and each shall have the same force and effect as the original.

**NOW THEREFORE**, the parties have caused this Agreement to be executed by its duly authorized representatives, effective as of the date first above written.

NORTH AMERICAN  
ELECTRIC RELIABILITY CORPORATION

[REGIONAL ENTITY]

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_



## **Exhibit A — Regional Boundaries**

**Exhibit A** to the delegation agreement for each Regional Entity receiving Delegated Authority shall describe the geographic or electrical boundaries covered by the proposed delegation of authority. **Exhibit A** for each Regional Entity shall reflect coordination with neighboring Regional Entities, as appropriate, to ensure that all relevant areas are either included within the geographic boundaries of a Regional Entity or specifically identified as not being within the geographic boundaries of any Regional Entity.

## **Exhibit B — Governance**

**Exhibit B** to the delegation agreement for each Regional Entity receiving Delegated Authority shall demonstrate that the Regional Entity meets the following requirements:

1. The Regional Entity shall be governed by an independent board, a balanced stakeholder board, or a combination independent and balanced stakeholder board.
2. The Regional Entity has established rules that assure its independence of owners, operators, and users of the bulk power system while assuring fair stakeholder representation in the selection of its directors.
3. The Regional Entity has established rules that assure balance in its decision-making committees and subordinate organizational structures.
4. The Regional Entity has established rules that provide reasonable notice and opportunity for public comment, due process, openness, and balance of interests in exercising its duties.
5. The Regional Entity has established rules that assure that no two industry sectors can control and no one industry sector can veto any action.

## Exhibit C – Standards Development Procedure

**Exhibit C** to the delegation agreement for each Regional Entity receiving Delegated Authority shall set forth the procedure the Regional Entity will use to develop Regional Reliability Standards. The regional standards development process shall meet the following requirements:

1. **Open** — The Regional Reliability Standards development procedure shall provide that any person or entity who is directly and materially affected by the reliability of the bulk power systems within the region shall be able to participate in the development and approval of reliability standards. There shall be no undue financial barriers to participation. Participation shall not be conditional upon membership in the Regional Entity or any organization, and shall not be unreasonably restricted on the basis of technical qualifications or other such requirements.
2. **Inclusive** — The regional reliability standards development procedure shall provide that any person with a direct and material interest has a right to participate by expressing an opinion and its basis, having that position considered, and appealing through an established appeals process if adversely affected.
3. **Balanced** — The regional reliability standards development procedure shall have a balance of interests and shall not be dominated by any single interest category.
4. **Due Process** — The regional reliability standards development procedure shall provide for reasonable notice and opportunity for public comment. At a minimum, the procedure shall include public notice of the intent to develop a standard, a public comment period on the proposed standard, due consideration of those public comments, and a ballot of interested stakeholders.
5. **Transparent** — All actions material to the development of regional reliability standards shall be transparent. All standards development meetings shall be open and publicly noticed on the Regional Entity's Web site.
6. **Accreditation of Regional Standards Development Procedure** — A Regional Entity's reliability standards development procedure that is accredited by the American National Standards Institute or the Standards Council of Canada shall be deemed to meet the criteria listed in this **Exhibit C**, although such accreditation is not a prerequisite for approval by NERC.
7. **Use of NERC Procedure** — A Regional Entity may adopt the NERC *Reliability Standards Development Procedure* as the regional reliability standards development procedure, in which case the Regional Entity's procedure shall be deemed to meet the criteria listed in this **Exhibit C**.

## Exhibit D – Compliance Enforcement Program

**Exhibit D** shall demonstrate through the use of program documents, policies, and procedures that the Regional Entity meets the following requirements related to its compliance enforcement functions as specified in the NERC Rules of Procedures, subject to articles 4(b) and 11 of this Agreement:

1. **Registration** — A Regional Entity shall provide for identification of the owners, operators, and users of the bulk power system who must comply with each Reliability Standard within its area of responsibility using its best efforts. The Regional Entity shall maintain and provide a listing of these owners, operators, and users of the bulk power system to NERC to be maintained in the NERC database and provided to the appropriate regulatory body.
2. **Authority** — A Regional Entity shall exercise its authority in carrying out the delegated functions of the NERC compliance enforcement program in a nondiscriminatory manner for the benefit of the public and the bulk power owners, users, and operators.
3. **Staff Code of Conduct** – Staff of the Regional Entity shall have the authority and responsibility for initially determining compliance or noncompliance of an entity subject to Reliability Standards and determine penalties, sanctions, and remedial actions. Staff of the Regional Entity shall be required to meet and follow code of conduct requirements prohibiting conflicts of interest that would cast doubt on the ability of the staff and any contractor of the Regional Entity to act with total objectivity with regard to the overall interests of the compliance program and its applicability to those entities subject to Reliability Standards. A Regional Entity shall be subject to a code of conduct review, at least every three years.
4. **Committee Member and Board Member Code of Conduct** – A Regional Entity shall have a code of conduct policy for its committee members, board members, and others involved in the compliance program prohibiting conflicts of interest which would cast doubt on the ability of the committee member, board member, or others involved with the compliance enforcement program to act with total objectivity with regard to the overall interests of the compliance program and to assure that it operates in a fair, nondiscriminatory manner and to implement such procedures in the governance of the Regional Entity as necessary to prevent control or the appearance of control of the decision-making by any committee member, board member, limited group of committee or board members not representing the overall interests of the Regional Entity, or any others involved in the compliance program. The Regional Entity shall have policies, practices, or other means that demonstrate it can fairly and nondiscriminatorily discharge its responsibilities under this Agreement.
5. **Antitrust** — The Regional Entity staff, committee members, and board shall comply with applicable state, provincial, and federal antitrust laws.

6. **Annual Compliance Enforcement Program Content** — All Reliability Standards must be included in the Regional Entity’s compliance enforcement program. The Regional Entity’s compliance enforcement program must actively monitor a subset of these Reliability Standards and the accompanying requirements as identified by NERC each year and includes audits of entities subject to Reliability Standards. A Regional Entity may include additional Reliability Standards in the annual compliance enforcement program.
7. **Annual Compliance Enforcement Program Implementation Plan** — The Regional Entity must annually develop and submit to NERC for approval a compliance enforcement implementation plan that identifies the Reliability Standards monitored, methodologies used to monitor, evaluate, report, and assess penalties by November 1 of each year.
8. **Monitoring Compliance** — The Regional Entity’s compliance enforcement program shall monitor compliance of Reliability Standards for all owners, operators, and users within its geographic boundaries set forth on **Exhibit A** of this Agreement.
9. **Disclosures** — The Regional Entity’s compliance enforcement program shall provide for prompt reports, to NERC, of all alleged and confirmed violations of Reliability Standards and associated penalties, sanctions, or remedial actions.
10. **Audit Schedule, Notification, and Participation** — The Regional Entity shall perform comprehensive compliance audits on a regular basis to determine compliance with all Reliability Standards identified for audit by NERC and will notify NERC compliance staff of all compliance audits. Each entity with primary reliability responsibilities for which certification is required will be audited on a three-year cycle utilizing on-site audits. For other registered entities, audits will be completed on a cycle established by NERC and the Regional Entity. NERC staff may participate on an audit team in any Regional Entity audit at any time at NERC’s discretion subject to scheduling requirements of the audit. Any applicable regulatory authority may participate on an audit team in any Regional Entity audit within its jurisdiction at the authority’s discretion.
11. **Investigations** — The Regional Entity shall initiate investigations as necessary to evaluate compliance with Reliability Standards when certain system events occur, or when other owners, operators, or users of the bulk power system file valid complaints. Investigations can be initiated at the discretion of the Regional Entity’s compliance staff, Regional Entity Executive Staff Officer, NERC compliance staff, or the NERC president. The Regional Entity shall have the capability or a process to conduct an investigation in a nondiscriminatory manner using qualified technical experts.
12. **Self-Reporting and Random Audits** — The Regional Entity shall maintain processes for self-reporting of violations of Reliability Standards including scheduled periodic reporting and reporting by exception. All self-reporting will be

certified as accurate by an authorized representative of the entity providing the report. Self-reported violations will be subject to random audits by the regional compliance staff.

13. **Due Process** — The Regional Entity’s compliance enforcement program shall maintain a fair, independent, and nondiscriminatory due process. The Regional Entity shall provide for immediate notification to a potentially noncompliant party of the preliminary finding of noncompliance, and for the opportunity of that party to respond, including by submission of supplemental or additional data as appropriate. The Regional Entity shall provide an alleged violator with adequate notice of the alleged violation and opportunity to present facts and arguments at a hearing before an impartial adjudicator. The Regional Entity shall notify NERC of all hearings and enforcement actions in a timely manner.
14. **Mitigation Plans** — The Regional Entity shall require that any entity found in noncompliance to a Reliability Standard requirement shall submit a mitigation plan reviewed and approved by the Regional Entity. The Regional Entity shall monitor all mitigation plans to assure completion and will report to NERC the disposition of all violations.
15. **Penalties, Sanctions, and Remedial Actions** — The Regional Entity shall have adequate controls to assure the consistent application of penalties, sanctions, and remedial actions in accordance with the approved guidelines and notice requirements established by NERC.
16. **Appeals** — Appeals from a final Regional Entity decision regarding a compliance enforcement matter shall be heard by NERC.
17. **Confidentiality**- The Regional Entity’s staff, its contractors, members, and others who perform aspects of the compliance program shall comply with the confidentiality requirements contained in the NERC delegation agreement and other confidentiality agreements required by NERC.
18. **Critical Energy Infrastructure Information** — The Regional Entity shall establish and maintain procedures to assure the protection of any information deemed by an entity, the region, or NERC as critical energy infrastructure information.
19. **Information Maintenance** – The Regional Entity shall provide for appropriate maintenance, confidentiality, and reporting of data and other information as required by NERC.
20. **Functional Separation** — Where a Regional Entity performs functions not under this Agreement, the Regional Entity shall maintain a segregation of responsibilities to ensure that no conflicts of interest that would cast doubt on the ability of Regional Entity staff and any contractor of the Regional Entity to act with total objectivity with regard to the overall interests of the compliance program and its applicability to those entities subject to Reliability Standards.

## Exhibit E — Funding

### 1. Scope of activities funded through the ERO funding mechanism

Each Regional Entity shall identify costs that will be incurred in support of delegated activities and activities that are in furtherance of NERC's responsibilities as the ERO under the Act, as specified in the NERC Rules. These activities shall include:

- Reliability Standard Development (Section 300)
- Compliance Enforcement (Section 400)
- Organization Registration and Certification (Section 500)
- Reliability Readiness Audit and Improvement (Section 700)
- Reliability Assessment and Performance Analysis (Section 800)
- Training and Education (Section 900)
- Situational Awareness and Infrastructure Security (Section 1000)

### 2. Allocation of Costs

Each Regional Entity shall demonstrate that the Regional Entity has established rules that equitably allocate its reasonable dues, fees, and other charges for its activities pursuant to the delegation agreement among all end users. Each Regional Entity shall be required to submit annually a list of the all load-serving entities within its geographic boundaries. NERC will seek approval from the applicable governmental authorities for all load-serving entities to be compelled to pay all NERC and Regional Entity costs under their jurisdiction.

### 3. Collection of Funding

NERC and each Regional Entity shall describe how invoices will be rendered and monies collected in the particular region.

NERC and each Regional Entity shall determine the most efficient and effective collection mechanism while assuring the all costs are equitably allocated to end users.

The billing and collection processes shall provide:

- A clear validation of billing and application of payments.
- A minimum of data requests to those being billed.
- Adequate controls to assure integrity in the billing determinants including identification of entities subject to NERC's authority.
- Consistent billing and collection terms.

NERC shall pursue any nonpayments and shall request assistance from applicable governmental authorities as necessary to secure collection.

Upon approval of the annual funding requirements by applicable governmental authorities, NERC shall fund each Regional Entities' costs identified in this Exhibit E in four equal quarterly payments.

#### 4. Application of Penalties

The Regional Entity that initiates an investigation that leads to the imposition of a penalty shall receive any penalty monies that result from that investigation.

All funds received by the Regional Entity initiating the investigation shall be applied as a general offset to the entity's budget requirements for the subsequent fiscal year. Funds from financial penalties shall not be directly applied to any program maintained by the investigating entity.

In the event NERC and a Regional Entity perform an investigation jointly, the Regional Entity shall receive the penalty monies and offset the entity's budget requirements for the subsequent fiscal year.

Exceptions to this policy due to statutory or regulatory restrictions will be considered on a case-by-case basis.



## **Exhibit F — Transition Plan**

**Exhibit F** to the delegation agreement for each Regional Entity shall include a description of and timetable for the actions that the Regional Entity will take to implement provisions of the delegation agreement.

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**Electric Reliability Organization Transition Plan  
From Application to Operation**

**North American Electric Reliability Council**

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## Introduction

Section 215 of the Federal Power Act and Federal Energy Regulatory Commission regulations<sup>1</sup> establish requirements for the formation of an electric reliability organization (“ERO”). The ERO is to be a self-regulatory industry organization with the authority to develop standards for the reliable operation and planning of the bulk power system and to enforce compliance with those standards. Under the legislation, the Federal Energy Regulatory Commission (“Commission”) provides oversight of the ERO in the United States. The ERO is to be an international organization with similar oversight of the ERO by governmental authorities in Canada.

The North American Electric Reliability Council (“NERC”) has been working toward becoming the self-regulating reliability organization for nearly ten years. The Electric Reliability (Blue Ribbon) Panel established much of the initial direction for NERC to become the ERO (then called the North American Electric Reliability Organization or NAERO) in its report released in December 1997. Many of the panel’s recommendations, such as formation of an independent board and inclusive stakeholder representation, have already been achieved. NERC has also adopted a standards development procedure accredited by the American National Standards Institute, approved a comprehensive set of reliability standards, and established a compliance monitoring and enforcement program.

Immediately following the enactment of the Energy Policy Act of 2005, NERC accelerated its preparations to become the ERO. The primary focus until now has been on preparing the application to become the ERO and developing documents necessary to form the ERO, such as a certificate of incorporation, bylaws, rules of procedure, and a *pro forma* regional entity delegation agreement.

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<sup>1</sup> Code of Federal Regulations Chapter 1, Title 18, Part 39.

Now that the application to become the ERO has been filed, NERC is shifting its attention to completing the remaining necessary steps to become the ERO. Some of these steps can be completed immediately, and other steps can only be accomplished after the Commission names NERC to be the ERO. NERC is targeting to begin operation as the ERO on January 1, 2007, or an alternative date determined by the Commission.

### **Continuity of NERC's Reliability Mission during Transition**

Of paramount importance in NERC's transition plan is to ensure continuity of NERC's reliability mission while restructuring the organization. Reliability standards are in effect today and NERC and the regional reliability councils are actively monitoring compliance with the standards. NERC has other reliability programs in place, such as the reliability readiness audits, personnel certification, training and education, and situation awareness and critical infrastructure protection. The transition plan is designed to allow NERC to continue operating under its present corporate structure for ensuring the reliability of the bulk power system of North America, while NERC works in parallel to put the ERO structure into place in an affiliate called the North American Electric Reliability Corporation ("NERC Corporation"). Once NERC Corporation is named as the ERO, the existing NERC will be merged into the new corporation and NERC Corporation will be the sole surviving entity.

### **Transition Objectives**

NERC's transition goals are to be named the ERO in the United States, to be recognized as the ERO by governmental authorities in Canada, and to be operational as the ERO on January 1, 2007, or an alternative date determined by the Commission. To realize these goals, NERC has the following objectives:

- To comply with all directives the Commission may have in its order naming NERC to be the ERO.
- To receive recognition as the ERO from applicable governmental authorities in Canada.
- To merge NERC and NERC Corporation, and transfer NERC assets, liabilities, and operations into the new organization.
- To execute agreements for the delegation of certain ERO functions to regional entities, consistent with the approved *pro forma* agreement, and to have the regional entities prepared to begin executing their delegated functions.
- To enroll the new members of NERC Corporation and elect the Member Representatives Committee.
- To receive approval of the budget and funding mechanism for calendar year 2007 operation of the ERO and the delegated regional entity functions.
- To complete portions of certain standards to make them ready for enforcement and revise the standards procedure as necessary for use by the ERO.
- To put into place the procedures and resources necessary for monitoring and enforcing compliance with the standards, including the setting of financial penalties.

Except for completion of the standards work, which is not contingent upon NERC being certified as the ERO, each of the objectives above can be achieved in final form only after NERC has been named the ERO.

## **Organization and Governance**

NERC has formed an affiliate, called North American Electric Reliability Corporation (“NERC Corporation”) for the purpose of preparing the organizational structure and procedures to become the ERO. Once NERC Corporation has been named as the ERO, NERC, NERC Corporation, and the eight regional reliability councils will approve a plan for merging NERC and NERC Corporation. The plan of merger will be approved and the merger consummated once the Commission approves NERC Corporation as the ERO and all parties understand the conditions under which that certification takes place.

NERC Corporation will be the surviving corporation following the merger and will assume the assets and liabilities of NERC. The certificate of incorporation and bylaws approved by the Commission as part of the ERO certification will be the certificate of incorporation and bylaws of the surviving corporation. NERC is following this approach because until such time as the new ERO is fully authorized, it is essential for NERC to continue operating in its present form to support the reliability of the North American bulk power system.

Once NERC is merged into NERC Corporation, the membership will no longer be the eight regional reliability councils. The new stakeholder-based membership of NERC Corporation will be enrolled and the new members will elect a Member Representatives Committee.

Figure 1 shows the timeline for completing the corporate structure and governance changes described above.

	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07
<b>ERO Corporation and Governance</b>												
Form new corporation within current NERC (interim bylaws 3/28/06)												
Current members vote to transfer organization (8/2/06)												
Populate ERO member segments (8/6–11/06)												
ERO members committee election (12/06)												
First ERO members meeting (2/07)												

Figure 1 — Timeline for Corporate Restructuring and Governance Changes

In addition to the corporate and governance changes described above, NERC has reorganized its staff resources effective March 1, 2006, around six mission-oriented functions of the ERO. NERC has established initial staffing levels in each of the areas and will continue to add outstanding new resources to reach the full complement of staff necessary to begin operations as the ERO in 2007.

**ERO Budget and Funding Mechanism**

To enable the ERO to become operational on January 1, 2007, the ERO 2007 calendar year budget and funding mechanisms must be approved by the Commission and applicable governmental authorities in Canada no later than November 30, 2006. NERC anticipates being able to send invoices to entities responsible for funding the ERO and regional entity delegated functions no later than December 1, 2006. Contingent upon NERC being named the ERO and approval of the 2007 ERO budget, NERC would no longer be funded by the regional reliability councils after December 31, 2006, a key aspect of assuring the independence of the ERO as it begins operation.

NERC has already begun to prepare a proposed 2007 ERO budget, and has developed a process by which the existing regional reliability councils can propose their 2007 budgets for their anticipated regional entity delegated functions. The plan anticipates that each regional



reliability council expecting to become a regional entity will submit a proposed budget to NERC for initial review by June 1, 2006. The NERC board will approve the 2007 ERO budget and the regional entity budgets on August 2, 2006. Budgets will be filed with the Commission and applicable governmental authorities in Canada by August 25, 2006.

NERC anticipates being able to issue invoices no later than December 1, 2006, to enable the start of ERO operations on January 1, 2007, and to ensure continuity of operations once the regional council funding terminates on December 31, 2006. This transition will be made only if the following conditions are met: a) NERC is named the ERO, b) the ERO and regional entity 2007 budgets are approved, and the funding mechanism is approved. Figure 2 outlines the key steps and timeline for establishing funding for the ERO and regional entities in 2007.

	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06
<b>ERO Funding &amp; Budgeting</b>										
Identify 2007 NERC Business Plan and Budget requirements										
Initial LSEs identified and estimated share of costs assigned (4/17/06 - finalized 11/1/06)										
2007 NERC Business Plan and Budget posted for comment (4/19/06)										
ERO review of proposed regional entity budgets										
Revised 2007 NERC Business Plan and Budget posted (6/21/06)										
Final regional entity budgets submitted for ERO approval (6/1/06)										
Regional entity budget review										
Final 2007 NERC Business Plan and Budget (combined ERO and regional entity budget) to board (7/19/06)										
2007 NERC Business Plan and Budget (combined ERO and regional entity budget) approval (8/2/06)										
First invoice to LSEs for ERO funding (12/1/06)										

Figure 2 — Timeline for Budget and Funding Mechanism

## Reliability Standards

NERC has work remaining in three areas to ensure the reliability standards submitted for Commission approval are ready to be enforced by January 1, 2007, under the provisions of Section 215 of the FPA and the Commission's regulations:

- Provide missing compliance elements in 21 existing reliability standards.
- Provide reliability risk factors for all existing reliability standards.
- Develop a work plan to address the "fill-in-the-blank" regional standards.

NERC plans to file supplemental standards information listed above as soon as possible but no later than November 8, 2006. This timetable is intended to allow the Commission an opportunity to post the information for comment and to make a final determination on approving the proposed standards and procedures to become effective January 1, 2007.

The first effort is to complete the missing compliance elements in 21 of the existing standards. These compliance elements are necessary for the determination of financial penalties for violating these standards. The missing compliance elements have been drafted and will be posted for two rounds of stakeholder comment beginning April 15 and July 1. The revised standards will be balloted in October, submitted for board approval on November 1, and filed with the Commission no later than November 8, 2006. The new measures and compliance elements are expected to be ready for implementation in the compliance program beginning January 1, 2007. NERC will also develop a procedure for approval by the NERC board on August 2, 2006, to transfer the development of levels of noncompliance to the compliance program in the future.

A second project to be completed before the implementation of financial penalties is the addition of the risk factors to all existing standards, as well as all new standards that will be filed in 2006. The drafting team has already ranked each requirement in all existing standards, noting

the potential reliability impact for violating each requirement. A high risk requirement is one for which a violation could cause or increase the severity of a cascading failure of the grid. A medium risk requirement could affect the state of the electric system, the capability of the system to operate reliably, or situational awareness. Lower risk requirements, such as reporting requirements, are administrative in nature. These risk factors, along with levels of noncompliance, are the primary factors in the determination of financial penalties.

The risk factors will be subject to stakeholder review and input through two public postings, beginning April 15 and July 1. During each posting, the industry will be asked to rank each requirement in the existing standards as high, medium, or lower risk. The drafting team will consider the results of these surveys in refining its recommended risk factors. The drafting team will also be adding risk factors for new standards that will be balloted during 2006 for filing with the Commission by November 8.

NERC plans to conduct a ballot of the risk factors in October 2006. The risk factors will be presented to the board on November 1 for approval and will be filed with the Commission no later than November 8 for approval. The risk factors will be balloted using a single ballot. The existing content of the standards will not be subject to review or approval, only the addition of the risk factor for each requirement will be subject to ballot.

The third major effort to prepare the standards for implementation is to complete an evaluation of the “fill-in-the-blank” regional standards and present a plan to the Commission for addressing these standards. NERC is recommending in the filing of its standards that the Commission conditionally approve these 25 standards to become effective as ERO reliability standards on January 1, 2007. NERC recommends to the Commission that the ERO and the regional entities will enforce compliance with these standards, except that there shall be no

determination of a violation of a reliability standard based on a failure to comply with regional criteria or procedures that are not part of a Commission-approved reliability standard.

NERC will hire a full-time regional standards manager to coordinate the review and development of regional standards. By May 31, 2006, NERC will collect the regional criteria, procedures, and other documents that the existing standards require regional reliability organizations to have in place. NERC will form a task group consisting of the NERC regional standards manager and a representative from each regional reliability organization with expertise in the regional criteria. The task group will review the status and consistency of the regional criteria and procedures, and determine a recommended course of action for each standard.

The task group will prepare a detailed report and work plan for board approval on November 1. NERC will file the report and work plan for approval by the Commission on November 8, 2006. The plan will provide a detailed schedule for addressing all of the conditionally approved regional “fill-in-the-blank” standards.

In addition to the activities described above to prepare the existing standards to become effective January 1, 2007, NERC will be modifying its Reliability Standards Development Procedure to be consistent with NERC’s role as the ERO. The modifications have been drafted and will be posted for stakeholder comment through May 15. The procedure will be subject to a ballot of the stakeholders in July 2006. The modified procedure will be submitted for board approval on August 2, 2006.

NERC will also be prepared, once it is named as the ERO, to begin reviewing regional reliability standards development procedures as they are submitted for approval. NERC expects that at least several regions will seek approval of their standards development procedures in 2006. NERC will review the procedures in accordance with the ERO rules of procedure and file

them as they are approved by the board. NERC also needs to be prepared, once it is named the ERO, for the possibility that some regions may submit regional reliability standards for approval in 2006.

The timetable for completing the standards transition work is provided in Figure 3.

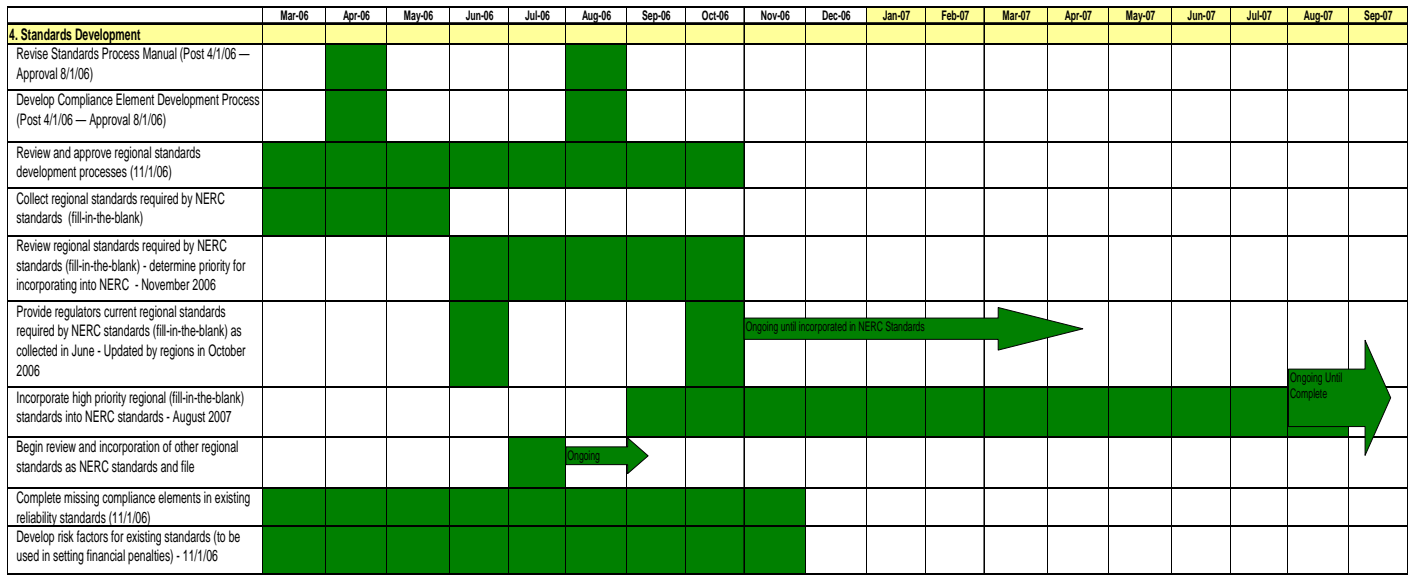


Figure 3 — Timeline for Standards Development

## Compliance Enforcement

NERC initiated its compliance enforcement program in 1999 with a pilot program to monitor compliance with a limited set of standards. The program was modeled to have the regional councils implement compliance monitoring and enforcement and for NERC to provide oversight of the regional programs. Each regional reliability council carries out its compliance enforcement program based on a set of requirements established by NERC.

Section 215 of the Federal Power Act and the Commission’s regulations recognize the role of regional entities in monitoring and enforcing compliance within their regional area, along with strong ERO oversight of the regional programs for consistency. NERC has proposed detailed requirements for the regional compliance programs in its rules of procedure. These

requirements will ensure greater consistency among the regional programs. However, NERC and the regional entities will need to modify their existing programs and procedures to meet these requirements. Much of the work will be completed in 2006; however some items will be completed in 2007.

The *pro forma* delegation agreement included with NERC’s ERO application envisions that each regional entity will have its own compliance monitoring and enforcement program, meeting NERC’s requirements. Each region will attach its compliance enforcement program as an exhibit to be filed with its executed delegation agreement.

NERC has begun to assist the regions in revising their compliance monitoring programs and developing reporting tools and procedures the regions will use to communicate compliance information to the ERO. This work will continue throughout 2006 and into 2007 as electronic reporting tools are refined to meet the needs of NERC, governmental authorities, and the regions.

Once approved as the ERO, NERC will establish procedures and protocols for reporting compliance information to the Commission and other governmental authorities in Canada. NERC will work closely with the staff of each governmental authority to fully meet their expectations and provide for effective and efficient reporting of compliance matters.

Figure 4 provides a summary of the transition steps for the compliance program.

	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07
<b>Compliance Monitoring</b>											
Update and finalize compliance reporting requirements from regional entities (4/15/06)											
Update reporting and analysis tools and develop proposal for enhanced tools to be developed in 2007											
Establish enhanced regional assistance, oversight, and audit function											
Assist regions in re-tooling existing compliance monitoring and audit programs											
Establish reporting processes with regulators											
Establish standards to be actively monitored in 2007 (9/30/06)											
Review and approve 2007 regional compliance enforcement program content (11/15/06)											

Figure 4 — Timetable for Compliance Program Transition

## **Implementation of Penalties and Sanctions**

NERC has included in its ERO application sanction guidelines that are based partly on the FERC *Policy Statement on Enforcement* issued on October 20, 2005. These sanction guidelines would apply to all standards and all owners, operators, and users of the bulk power system. The sanction guidelines include provisions for application of penalties, sanctions, remedial actions, and directives to comply with a standard.

NERC has historically applied a penalty matrix to calculate penalties, although penalties have not been collected in the absence of the necessary statutory authority. NERC will apply the proposed sanction guidelines during 2006, without collecting penalties, to identify any improvements necessary prior to the application of financial penalties. NERC will work closely with the appropriate governmental authorities to ensure that the penalties and sanctions applied are appropriate and meet the expectations of governmental authorities.

In October 2006, NERC will file any revisions to the sanction guidelines that are made based on this experience. NERC proposes that the Commission and applicable government authorities in Canada approve these revised sanction guidelines for use for a six-month notice period beginning January 1, 2007. During this period, financial penalties would be determined and the violating entities would be noticed, but penalties would not be collected. This will provide an opportunity for a formal test of the sanction guidelines, with a report of their effectiveness to be provided to the Commission and governmental authorities in Canada by May 31, 2007. This period will allow sufficient notice to registered bulk power system owners, and have a positive impact on performance.

Given that the six-month notice period for the sanction guidelines will not expire until June 30, 2007, registrants will not be subject to penalties or sanctions for initial ERO standards until July 1, 2007.

The timeline below shows the key steps expected to be completed by NERC to implement the sanction guidelines.

	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07
<b>Enforcement sanctions and penalties</b>																		
Develop initial ERO Sanction Guidelines (3/15/06)	█																	
Calculate penalties with initial ERO Sanction Guidelines and interim risk factors		█	█	█	█	█	█											
Final ERO Sanction Guidelines developed for compliance filing (10/2/06)							█											
Calculate penalties based on final ERO Sanction Guidelines and final risk factors - letters with notice of penalty to corporate officer with defined notice period when penalties apply								█	█	█	█	█	█	█	█	█	█	█
Notice and collect penalties for violations (7/1/07)																		→ ongoing

Figure 5 — Timetable for Implementing Sanction Guidelines

### Registration of Bulk Power System Owners, Operators, and Users

The ERO must know who is responsible for the reliability related functions on the bulk power system if it is to monitor and enforce compliance with reliability standards. NERC has begun to identify the bulk power system owners, operators, and users which are required to comply with the standards. An initial registration of entities providing six reliability functions was conducted leading up to the April 1, 2005, effective date of the Version 0 standards. In February 2006, NERC began working with the regional councils to update the responsible entity registration. The registration has been expanded in 2006 to include all entities who are bulk power system owners, operators, and users that must comply with reliability standards.

During 2006, NERC will continue to work with the regions to update and refine the registration of responsible entities. Once certified as the ERO, NERC will provide notice to all registrants that they are responsible to comply with the standards.



The timeline below shows the key steps for completing the registration of bulk power system owners, operators, and users that will be monitored for compliance with reliability standards.

	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07
<b>Organization registration and certification</b>											
Regions provide initial registration list (3/15/06)	█										
Registration list included with ERO application (4/4/06)		█									
Collect detailed registration information from regions (4/30/06)		█									
Notice provided to entity officer of obligations (after ERO certification)					█						
Update and maintain registration										█	→

Figure 6 — Timetable for Completing Responsible Entity Registration

### Delegation of ERO Functions to Regions

The execution of regional delegation agreements is a critical step in NERC’s transition. Regional entities will perform many of the activities necessary to support NERC’s statutory obligations as the ERO. A *pro forma* delegation agreement, negotiated by NERC and the regional reliability councils, is included with this application. The *pro forma* agreement has been constructed to ensure consistent application of the ERO’s statutory authority across all regions, with a designated set of exhibits in which each region will provide region-specific information in accordance with certain principles set out by the *pro forma* agreement. NERC continues to negotiate the individual agreements based on this *pro forma* agreement.

Once the *pro forma* agreement and the principles that it sets out for each of the exhibits are approved by the appropriate governmental authorities, NERC will work with each prospective regional entity to finalize certain aspects of its exhibits to the delegation agreement, including:

- The regional entity’s governance structure.
- The regional entity’s standards development process.

- A list of functions being delegated to the regional entity by the ERO.
- The regional entity's compliance enforcement program.
- A description of the regional entity's funding and revenue collection.
- The regional entity's plan for being ready to perform the delegated functions.

While NERC has been engaged in active discussion with all of the regional reliability councils for some time, final negotiations on these exhibits cannot be concluded until after the Commission has named NERC as the ERO and approved the *pro forma* delegation agreement. After NERC is named the ERO and the *pro forma* delegation agreement is approved, NERC anticipates that executed delegation agreements can be filed within 60 days for approval.

If it appears that closure in the negotiations with a particular region will not be reached in time for governmental authorities to approve the delegation agreement for that region, NERC will provide a contingency plan describing how compliance will be monitored in that area. NERC anticipates that this contingency plan will provide for either the regional entity to carry out certain agreed upon functions absent a fully executed agreement, or for the ERO or another region to fulfill the necessary functions.

### **Other Functions Necessary for an Effective ERO**

NERC has identified other functions necessary for an effective ERO with this application. Some of these programs, including reliability readiness audit and improvement, are currently in place and will require little transition activity. Others are extensions and enhancements of current NERC activities to meet the needs of a strong ERO, such as reliability assessment and performance, training and education, and situation awareness. These programs will be implemented to the extent possible in 2006 and further developed in 2007.

## **Committees, Technical Groups, and Forums**

One of NERC's greatest strengths has been its ability to attract technical expertise from within the industry to participate in reliability activities. NERC has initiated a review of its present committees and technical groups to determine an effective and efficient structure and role for these committees in support of the ERO mission. NERC will implement these changes at an appropriate time in the early stages of operation as the ERO, while ensuring a smooth transition from the existing committees. All standing committees of the ERO will meet the requirements for stakeholder balance as required by the Commission's regulations.

Other groups of technical expertise may be established as focused forums to provide expertise to the program areas and support the development of reliability standards.

## **Regional Reliability Council Transition to Regional Entities**

The existing regional reliability councils are critical to a successful transition to the ERO. Negotiations must be completed in each of the regions in order to delegate the statutory functions, along with any other functions, that are necessary for NERC to fulfill its responsibilities as a strong and effective ERO. The regional reliability councils have begun to review and revise their existing standards development procedures and compliance programs in preparation for executing delegation agreements. NERC is working with the regional reliability councils to develop budget and funding processes. Each regional reliability council is working to prepare its exhibits to the delegation agreement.

## **Industry Transition Activities**

Bulk power system owners, operators, and users are also actively involved in the formation of the ERO and the regional entities. In addition to providing expertise for standards and other NERC and regional activities, each entity is preparing its own compliance programs to

ensure compliance with the reliability standards. Many have or are assigning personnel to be responsible for compliance with the reliability standards. For some who have not been as actively engaged with NERC and the regional councils in the past, the transition will be even more significant. NERC will provide an education and outreach program to provide an understanding of the obligations of entities in the compliance and enforcement program.

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