

# NERC

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

## **Rules of Procedure**

Effective: February 21, 2008

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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 made applicable to such entities by approval pursuant to applicable legislation or regulation, or pursuant to 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.

NERC shall comply with each approved reliability standard that identifies NERC or the electric reliability organization as a responsible entity. Regional Entities shall comply with each approved reliability standard that identifies Regional Entities as responsible entities. A violation by NERC or a Regional Entity of such a reliability standard shall constitute a violation of these Rules of Procedure.

## **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 Used in Reliability Standards adopted in conjunction with NERC's Reliability Standards, or in accordance with their commonly understood and used technical meanings in the electric power industry, including applicable codes and standards.

### **202. Specific Definitions**

“Board” means the Board of Trustees of NERC.

“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. The term does not include facilities used in the local distribution of electric energy.

“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.

“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 NERC to expire.

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

“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.

“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.

“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.

“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, ReliabilityFirst Corporation, SERC Reliability Corporation, Southwest Power Pool, and Western Electricity Coordinating Council.

“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.

“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 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 criteria are not enforceable pursuant to NERC-delegated authorities, but may be enforced through other available mechanisms. Regional criteria may include specific acceptable operating or planning parameters, guides, agreements, protocols or other documents.

“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.

“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 the term does not include any requirement to enlarge bulk power system facilities or to construct new transmission capacity or generation capacity. A reliability standard shall not be effective in the United States until approved by the Federal Energy Regulatory Commission and shall not be effective in other jurisdictions until made or allowed to become effective by the applicable governmental authority.

“Variance” means an aspect or element of a reliability standard that applies only within a particular regional entity or group of regional entities, or to a particular entity or class of entities. A variance allows an alternative approach to meeting the same reliability objective as the reliability standard, and is typically necessitated by a physical difference. A variance is embodied within a reliability standard and as such, 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.



## **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, in the public interest, and consistent with 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 reliable bulk power systems shall be made available to those entities responsible for planning and operating 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 and 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 presented to the entities responsible for complying with the standards.
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 or other confidential 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 3A**. 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 its 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 written documentation signed by the representative of the registered participant 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 are defined in the *Reliability Standards Development Procedure* in **Appendix 3A**.
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 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. Steps in the Development of Reliability Standards**

1. **Procedure** — NERC shall develop reliability standards through the process set forth in the NERC *Reliability Standards Development Procedure* (**Appendix 3A**). The procedure includes a provision for approval of urgent action standards that can be completed within 60 days and emergency actions that may be further expedited.
2. **Board Approval** — Reliability standards or revisions to reliability standards approved by the ballot pool in accordance with the *Reliability Standards Development Procedure* 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.

3. **Governmental Approval** — After receiving board approval, a reliability standard or revision to a reliability standard shall be submitted to all 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 or is otherwise made effective pursuant to the laws applicable to 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. Each filing shall be in the format required by the ERO governmental authority 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 applicable 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, respecting to the extent possible the provisions in the standards development process for reasonable notice and opportunity for public comment, due process, openness, and a balance of interest in developing reliability standards.
3. **Directives to Develop Standards under Extraordinary Circumstances** — An ERO governmental authority may, on its own initiative, determine that extraordinary circumstances exist requiring expedited development of a reliability standard. In such a case, the applicable agency may direct the development of a standard within a certain deadline. NERC staff shall prepare the standards authorization request and seek a stakeholder sponsor for the request. If NERC is unable to find a sponsor for the proposed standard, NERC will be designated as the requestor. The proposed standard will then proceed through the standards development process, using the urgent and emergency action procedures

described in the *Reliability Standards Development Procedure* as necessary to meet the specified deadline. The timeline will be developed to respect, to the extent possible, the provisions in the standards development process for reasonable notice and opportunity for public comment, due process, openness, and a balance of interests in developing reliability standards.

- 3.1 Consistent with all reliability standards developed under the urgent or emergency action process, each of the three possible follow-up actions as documented in the *Reliability Standards Development Procedure* are to be completed through the standards development process and are subject to approval by the ERO governmental authorities in the U.S. and Canada.

### **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 permit any two interest categories to control the vote on a matter or any single interest category to defeat a matter.
  - 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. Regional Reliability Standards**

1. **Basis for Regional Reliability Standards** — Regional entities may propose regional reliability standards that 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 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.

- 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. 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 made effective within Canada 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.

4.2 **Notice and Comment Procedure for Non-Interconnection-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 Non-Interconnection-wide Regional Reliability Standards** — NERC shall evaluate and recommend whether a proposed non-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. 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 non-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.

- 4.5 **Enforcement of Non-Interconnection-wide Regional Reliability Standards** — A non-Interconnection-wide regional reliability standard that has been approved by the board and by the applicable ERO governmental authorities or is otherwise made effective within Canada as mandatory within a particular region shall be applicable and enforced as a NERC reliability standard within the region.

5. **Appeals**

A Regional Entity shall have the right to appeal NERC's decision not to approve a proposed regional reliability standard or variance to the Commission or other applicable governmental authority.

**313. 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.

**314. 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.

**315. 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.

**316. 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.

**317. 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*.

**318. 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.

**319. 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.

**320. Alternate Method for Adopting Violation Risk Factors**

In the event the standards development process fails to produce violation risk factors for a particular standard in a timely manner, the Board of Trustees may adopt violation risk factors for that standard using the procedures set out in Section 1400 of these Rules of Procedure.

## **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 Monitoring and 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 a regional entity (pursuant to a delegation agreement with NERC that has been approved by the applicable ERO governmental authority) has been given enforcement authority. There are four distinct parts of the NERC Monitoring and 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** — Where required by applicable legislation, regulation or agreement, 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 and the applicable ERO governmental authority 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 approved by the applicable ERO governmental authority shall, in accordance with the terms of the approved delegation agreement, administer a regional entity compliance enforcement program to meet the NERC Compliance Monitoring and Enforcement Program goals and the requirements in this Section 400.
5. **Program Continuity** — NERC will 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.



- 5.1 Should NERC not have a delegation agreement with a regional entity covering a geographic area, or a regional entity withdraws from an existing delegation agreement or the delegation agreement is otherwise terminated, NERC will directly administer the Compliance Monitoring and Enforcement Program applicable to owners, operators and users of the bulk-power system within that geographic area.
  1. This monitoring and enforcement will be accomplished by NERC and compliance staff from another approved regional entity.
  2. If an existing delegation agreement with a regional entity is terminating, the regional entity shall promptly provide to NERC all relevant compliance information regarding registered entities, contacts, prior compliance information and actions, mitigation plans, and remedial actions for the period in which the regional entity was responsible for administering the Compliance Monitoring and Enforcement Program.
  3. NERC will levy and collect all penalties directly and will utilize any penalty monies collected to offset the expenses of administering the compliance monitoring and enforcement program for the geographic area.
- 5.2 Should a regional entity seek to withdraw from its delegation agreement, NERC will seek agreement from another regional entity to amend its delegation agreement with NERC to extend that regional entity's boundaries for compliance monitoring and enforcement. In the event no regional entity is willing to accept this responsibility, NERC will administer the Compliance Monitoring and Enforcement Program within the geographical boundaries of the regional entity seeking to withdraw from the delegation agreement, in accordance with Section 401.5.1.
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 NERC *Sanction Guidelines*, which is incorporated into these rules as **Appendix 4B**.
8. **Multiple Enforcement Actions** – A registered entity shall not be subject to an enforcement action by NERC and a regional entity for the same violation.
9. **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 the regional entity's compliance enforcement program. Oversight and monitoring by NERC shall be accomplished through an annual compliance enforcement program review, program audits, and regular evaluations of regional entity compliance enforcement program performance as described below.
  - 1.1 **NERC Review of Regional Compliance Enforcement Program Annual Plans** — NERC shall require each regional entity to submit for review and approval an annual compliance enforcement program implementation 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.
  - 1.2 **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 the NERC Compliance and Certification Committee.
  - 1.3 **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 Monitoring and Enforcement Program. The evaluation shall be based on these rules of procedures, the delegation agreement, approved regional entity annual compliance enforcement program annual implementation plans, required program attributes, and the NERC compliance program procedures. These evaluations shall be provided to the appropriate ERO governmental authorities to demonstrate the effectiveness of each regional entity.
    - 1.3.1 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 4A**.
    - 1.3.2 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.

- 1.4 ERO governmental authorities will be allowed to participate as an observer in any audit conducted by NERC of a regional entity's compliance monitoring and enforcement program. A representative of the regional entity being audited will be allowed to participate in the audit as an observer.
2. **Consistency Among Regional Compliance Enforcement Programs** — To provide for a consistent compliance enforcement program for all bulk power system owners, operators, and users required to comply with approved reliability standards, NERC shall maintain a single, uniform compliance monitoring and enforcement program. 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 in each regional entity delegation agreement.
  - 2.1 NERC shall ensure that each of the regional entity compliance enforcement programs meets these Rules of Procedure and follows the terms of the delegation agreement and the approved regional entity compliance enforcement program annual plan.
  - 2.2 NERC shall develop a single, uniform compliance monitoring and enforcement program containing the 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.
  - 2.3 NERC shall periodically conduct regional entity compliance manager forums. These forums shall use the results of regional entity compliance program audits and findings of NERC compliance staff to identify and refine regional entity compliance program differences into a set of best practices over time.
3. **Information Collection and Reporting** — NERC and the regional entities shall implement data management procedures that address data reporting requirements, data integrity, data retention, data security, and data confidentiality.
4. **Violation Disclosure** — NERC shall disclose all confirmed violations and maintain as confidential alleged violations, according to the reporting and disclosure process in Section 408.
5. **Authority to Determine Noncompliance, Levy Penalties and Sanctions, and Issue Remedial Action Directives** — 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 remedial

action directives. Regional entity boards or a compliance panel reporting directly to the regional entity board will be vested with the authority for the overall regional entity compliance program and have the authority to impose penalties and sanctions on behalf of NERC, where authorized by applicable legislation or agreement. Remedial action 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 ERO governmental authority to issue a compliance order.

6. **Due Process** — NERC shall establish and maintain a fair, independent, and nondiscriminatory appeals process. The appeals process is set forth in 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 of 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.

7. **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.
8. **Confidentiality** — To maintain the integrity of the NERC Compliance Monitoring and 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.
  - 8.1 NERC and the regional entity shall have in place appropriate codes of conduct and confidentiality agreements for staff and other compliance enforcement program participants.
  - 8.2 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.
  - 8.3 Information deemed by a bulk power system owner, operator, or user, regional entity, or NERC as critical energy infrastructure information shall

not be distributed outside of a committee or team, nor released publicly. Other information subject to confidentiality is identified in Section 1500.

8.4 In the event that a staff, committee, or audit team member violates 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.

9. **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. Regional entities must include rules providing that no two industry sectors may control any decision and no single segment may veto any matter related to compliance.
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 Monitoring and Enforcement Program in accordance with delegation agreements. These functions include but are not limited to: data gathering, data reporting, compliance violation investigations, compliance 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 Monitoring and Enforcement Program, a regional entity shall not sub-delegate its compliance enforcement program 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 present facts and other information to contest a notice of alleged violation or any proposed penalty, sanction, or remedial action. Compliance hearings shall be conducted in accordance with the Hearing Process set forth in Attachment 2 to the NERC Compliance Monitoring and Enforcement Program document. If a stakeholder body serves as the hearing body, no two industry sectors may control any decision and no single segment may veto any matter related to compliance after recusals.

#### **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 compliance violation investigations, compliance audits, 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 compliance violation investigation or compliance audit to provide technical advice or recommendations in the determination of compliance or noncompliance in compliance audits, compliance violation investigations, or review of self-reported violations.
  - 6.4 Regional entity compliance enforcement program staff shall abide by the confidentiality requirements contained in Section 1500 of these Rules of Procedure, the NERC delegation agreement and other confidentiality agreements required by the NERC Compliance Monitoring and 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 compliance violation investigations, compliance 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 regional entity or regional reliability organization committees shall not make initial determinations of noncompliance or levy penalties, sanctions, or remedial actions. Any committee involved shall be organized so that no two industry sectors may control any decision and no single segment may veto any matter related to compliance.
- 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 compliance audits and compliance violation 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. NERC and the regional entities shall preserve any mark of confidentiality on information submitted pursuant to Section 1502.1.
  - 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 remedial action directives to owners, operators and users of the bulk-power system to comply with reliability 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 compliance 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 the activities 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 organizational certification), the compliance audit will be performed at least once every three years. For other bulk power system owners, operators, and users on the NERC Compliance Registry, compliance 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 bulk power system owners, operators, and users on the NERC Compliance Registry, the audit may be either an on-site audit or based on review of documents, as determined to be necessary and appropriate by NERC or regional entity compliance program, staff.
- 11.3 Compliance audits must include a detailed review of the activities of the bulk power system owner, operator, or user to determine if the bulk power system owner, operator, or user is complying with all approved reliability standards identified for audit by NERC. The compliance audit shall include a review of supporting documentation and evidence used by the bulk power system owner, operator or user 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 ERO governmental authority may participate on an audit team as an observer in any regional entity audit within its jurisdiction, at the ERO governmental authority's discretion.
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 a compliance audit and previously reported compliance information. After due process is complete, this evaluation (excluding any critical energy infrastructure information or other confidential

information) shall be made public. The regional entity shall send the report to NERC for public posting.

13. **Compliance Violation Investigations** — Compliance violation investigations are necessary to determine if a violation of reliability standards has occurred 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 compliance violation investigations. Compliance violation 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 allege a violation of reliability standards by a bulk power system owner, operator, or user. The regional entity may ask NERC to assist with the compliance violation investigation. Situations that can trigger a compliance violation 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 evaluations, (v) spot-checks to verify submitted data, (vi) filing of a compliance complaint with the regional entity or NERC, or (vii) Nuclear Regulatory Commission-defined incidents occurring on the transmission system.
14. **Confidentiality of Compliance Audits and Compliance Violation Investigations** — All compliance violation investigations are to be non-public unless NERC or regional entity determines a need to conduct a public investigation. Advance authorization from the applicable ERO governmental authority is required to make public any compliance violation investigation, compliance audit, or any information relating to a compliance violation investigation or compliance audit, or to permit interventions when determining whether to impose a penalty. This prohibition on making public any compliance violation investigation or compliance audit does not prohibit NERC or a regional entity from publicly disclosing the initiation of or results from an analysis of a significant system event under Section 807 or of off-normal events or system performance under Section 808, so long as specific allegations or conclusions regarding alleged violations of reliability standards are not included in such disclosures.
15. **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 a compliance audit or compliance violation 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 compliance audits, compliance violation investigations, or hearings.

16. **Critical Energy Infrastructure Information** — Information that would jeopardize bulk power system reliability, including information relating to a Cyber Security Incident will be identified and protected from public disclosure as critical energy infrastructure information. In accordance with Section 1500, information deemed by a bulk power system owner, operator, or user, regional entity, or NERC as critical energy infrastructure information shall be redacted according to NERC procedures and shall not be released publicly.
17. **Penalties, Sanctions, and Remedial Actions** — Each regional entity will apply all penalties, sanctions, and remedial actions 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 by NERC and submitted to the appropriate ERO governmental body for approval. All confirmed violations, penalties, and sanctions will be provided to NERC for review and filing with applicable ERO governmental authorities as a notice of penalty.
18. **Mitigation of Violations** — Each regional entity compliance enforcement program will require that any bulk power system owner, operator, or user found to be in noncompliance with 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 entity compliance staff and the regional entity's compliance panel or board as appropriate.
19. **Settlement Processes** — The regional entity may enter into a settlement process with owners, operators and users of the bulk power system 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 the 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 ERO governmental authority. NERC shall publicly post each violation (whether confirmed or not) that is settled, and the resulting penalty or sanction.
20. **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 proposed to be levied. The regional entity hearing process shall be conducted before the regional entity board or a balanced committee established by and reporting to 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. The regional entity hearing process shall (i) include provisions for recusal of any members of the hearing body with a potential conflict of interest, real or perceived, from all compliance matters considered by the hearing body for which the potential conflict of interest exists and (ii) provide that no two industry sectors may control any decision and no single segment may veto any matter brought before the hearing body after recusals.

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.

If a bulk power system owner, operator, or user has completed the regional entity hearing process and desires to appeal the outcome of the hearing, 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 an ERO governmental authority shall be appealed with that ERO governmental authority.

21. **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 (both those required by NERC and any additional reliability standards the regional entity proposes to monitor), and how each NERC and regional entity identified standard will be monitored, evaluated, reported, sanctioned, and appealed. These implementation plans will be submitted to NERC on the schedule established by NERC, generally on or about November 1 of the preceding year.

21.1 In conjunction with the annual 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. Each region will provide its annual report on the schedule established by NERC, generally on or about February 15 of the following year.

**404. NERC Monitoring of Compliance for Regional Entities, Regional Reliability Organizations, or Bulk Power Owners, Operator, or Users**

NERC shall monitor regional entity or regional reliability organization compliance with NERC reliability standards and, if no there is no delegation agreement in effect with a regional entity for the geographic area, shall monitor bulk power system owners, operators, and users for compliance with NERC reliability standards. Industry experts may be used as appropriate in compliance violation investigations, compliance 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 and Monitoring 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 shall impose sanctions, penalties, or remedial action directives when there is a finding of noncompliance. NERC shall post all violations of reliability standards that apply to the regional entities or regional reliability organizations as described in the reporting and disclosure process in Section 408.

In addition, NERC will directly monitor bulk power system owners, operators, and users for compliance with NERC Reliability Standards in any geographic area for which there is not a delegation agreement in effect with a regional entity. In such cases, NERC will serve as the Compliance Monitor described in the NERC Compliance Monitoring and Enforcement Program document. Compliance matters contested by bulk power system owners, operators, and users in such an event will be heard by the NERC Compliance and Certification Committee.

2. **Mitigation Plans** — An owner, operator or user of the bulk-power system or a regional reliability organization found by NERC to be in noncompliance with a reliability standard shall submit to NERC for approval a mitigation plan with a timeline addressing how the noncompliance will be corrected.
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** — Any regional entity, regional reliability organization or bulk-power system owner, operator or user found by NERC, as opposed to a regional entity, to be in noncompliance with a reliability standard may appeal the findings of noncompliance with reliability standards and any sanctions, or remedial action directives that are issued by NERC pursuant to the processes described in Sections 409 through 411.

#### **405. Monitoring of Standards and Other Requirements Applicable to NERC**

The NERC Compliance and Certification 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. The Compliance and Certification

Committee will also establish a procedure for monitoring NERC's compliance with its Rules of Procedure for the Standards Development, Compliance Enforcement, and Organization Registration and Certification Programs. Such procedures shall not be used to circumvent the appeals processes established for those programs.

**406. Independent Audits of the NERC Compliance Monitoring and Enforcement Program**

NERC shall provide for an independent audit of its compliance monitoring and 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 Monitoring and Enforcement Program in achieving its mission.
2. **Relationship** — The 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 Monitoring and Enforcement Program, the administrators of the NERC Compliance Monitoring and 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 all penalties, sanctions, and remedial actions imposed by each regional entity for violations of reliability standards 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 4B**, 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, conforming to Attachment 2 of the NERC Compliance Monitoring and Enforcement document. 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 ERO governmental authority.

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 ERO 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 ERO 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 the requirements established in the NERC Compliance Monitoring and Enforcement Program procedures document. Probable violations from NERC readiness evaluations will be treated as alleged violations 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 ERO governmental authorities. NERC shall promptly notify the applicable ERO governmental authority of any self-reported, confirmed, or alleged violation of a reliability standard, any compliance violation investigation, any imposition of a penalty or sanction, or any remedial action directive.
  - 1.1 Requirements of reliability standards for which noncompliance may cause bulk power system reliability to be diminished or at risk, will be identified by NERC and require reporting by the regional entity to NERC within 48 hours after the regional entity learns of the violation. 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 compliance investigation. NERC will promptly report such violation to the applicable ERO governmental authority.
2. **Reporting Process** — NERC shall implement and maintain a reporting process and utilize appropriate tools to facilitate reporting of violations. The reporting process shall identify all of the information required to be included in a violation report. NERC will report the disposition of each violation or alleged violation to the applicable ERO governmental authority on a quarterly basis.
3. **Confidential Information** — NERC will treat all alleged violations and matters related to a compliance violation investigation, including the status of the compliance violation investigation, as confidential in accordance with Section 1500. Any entity seeking to protect information as confidential shall follow the procedures of Section 1500. This information may result from compliance

violation investigations, compliance audits, and proceedings concerning an alleged violation or proposed penalty or sanction.

Information that would jeopardize bulk power system reliability, including information relating to a Cyber Security Incident will be identified and protected from public disclosure as critical energy infrastructure information in accordance with Section 1500.

- 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 types of information that will be considered confidential and will not (subject to statutory and regulatory requirements) be disclosed in any public information reported by NERC are identified in Section 1500.
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 final compliance audit or compliance violation investigation report on its Web site.
  - 6.1 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.
  - 6.2 In accordance with Section 1500, 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) or other confidential information shall be redacted in accordance with Section 1500 and not be released publicly.
  - 6.3 Subject to redaction of critical energy infrastructure information or other confidential information, for each confirmed violation or settlement relating to an alleged violation, the public posting shall include the name of any relevant entity, the nature, time period, and circumstances of such violation or alleged violation, and sufficient facts to enable owners,



operators and users of the bulk power system to evaluate whether they have engaged in or are engaging in similar activities.

**409. Review of NERC Decisions**

1. **Scope of Review** — A regional entity or 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 notice of finding of violation or audit finding.
2. **Contents of Notice** — The notice of challenge 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 Monitoring and Enforcement Program** — Within 21 days after receiving a copy of the notice of challenge, the NERC Director of Compliance may file with the hearing body 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, regional entity, registered entity, and the NERC Compliance Monitoring and 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, regional entity, or registered 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 written decision by the Compliance and Certification Committee. The notice of appeal shall include the full text of the written 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 Monitoring and Enforcement Program** — Within 21 days after receiving a copy of the notice of appeal, the NERC Compliance Monitoring and Enforcement Program staff 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, regional entity, or registered entity, and the NERC Compliance Monitoring and Enforcement Program to appear before the Committee. Decisions of the Compliance Committee shall be final, except for further appeal to the applicable ERO governmental authority.
9. **Impartiality** — No member of the Compliance and Certification Committee or the Board of Trustees Compliance Committee having an actual or perceived conflict of 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 owner, operator or user of the bulk-power system 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 final decision of the regional entity hearing body. The same appeal procedures will apply regardless of whether the matter first arose in a compliance violation investigation, compliance audit or self-report, or in a reliability readiness evaluation.
2. **Contents** — The notice of appeal shall include the full text of the final decision of the regional entity hearing body 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 compliance hearing before the regional entity hearing body.
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 of the matter from the regional entity, the response, and any reply filed with NERC. At its discretion, the Compliance Committee may invite representatives of the entity making 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 ERO 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 set forth the identity and functions performed for each organization responsible for meeting requirements of the reliability standards 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) A generation or transmission cooperative, a joint-action agency or another organization (a Joint Registration Organization or JRO) may be registered, in lieu of each of the JRO's members or related entities being registering individually, by the JRO accepting the reliability functions identified in Section 1.1 above, or (b) a JRO and its members or related entities may enter into a written agreement as to which of them will be responsible for one or more reliability standards applicable to a particular function and/or for one or more requirements within particular reliability standards applicable to a particular function and/or for one or more requirements within particular reliability standards, in either case in accordance with the provisions specified in Section 507 (each of (a) and (b), a "joint registration").

For purpose of this Section 501.1.2.7 and Section 507, a "related entity" is an entity whose operations in relation to the operation of the JRO make it feasible for the JRO to accept responsibility for reliability functions for which the related entity would otherwise be responsible. A non-exclusive list of examples of JROs and related entities includes (i) a balancing authority or a transmission

provider as the JRO, and (ii) a load-serving entity or a distribution provider within the balancing authority's control area or receiving transmission services from the transmission provider, as the related entity.

- 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.
  - 1.3.7 Each entity identified in the registry shall notify NERC and its corresponding regional entity of any changes in ownership, corporate structure, or similar matters that affect the entity's responsibilities with respect to the reliability standards. Failure to notify will not relieve the entity from any responsibility to comply with the reliability standards or shield it from any penalties or sanctions associated with failing to comply with such standards.
- 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 Web site and shall update the compliance registry monthly.
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**

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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.

- 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 participation.



- 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 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 1500 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 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 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 immediate dismissal from the audit team and may be prohibited from future participation in compliance program activities 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 Organization Registration and Certification Procedures, which are incorporated into the Rules of Procedure as **Appendix 5**.
  - 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 18 C.F.R. Section 39.2 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 and reporting to 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.

**507. Provisions Relating to Joint Registrations and Joint Registration Organizations**

1. **Registration by a JRO.** In addition to registering as the entity responsible for all functions that a JRO performs itself, a JRO may register on behalf of one or more of its members or related entities for one or more functions as to which such members or related entities would otherwise be required to register, and thereby accept on behalf of such members or related entities all compliance responsibility, including reporting requirements, for all requirements of reliability standards applicable to the function or functions for which the JRO has registered on behalf of its members or related entities. Any entity seeking to register as a JRO for any or all requirements identified in the reliability standards that would otherwise be the responsibility of one or more of its members or related entities shall provide to the applicable regional entity information, in the form requested by the regional entity, sufficient to identify whether the entity or its member(s) or related entities will be responsible for compliance with each provision of the reliability standards for the applicable functional responsibilities covered by the joint registration. The JRO must identify its primary compliance contact. The JRO primary compliance contact is responsible for providing all of the information and data, including submitting reports, as needed by the regional entity for performing assessments of compliance.
2. **Joint registration pursuant to written agreement.** Where a JRO and any of its members or related entities agree, in writing, upon a division of compliance responsibility among them for one or more reliability standard(s) applicable to a particular function, and/or for one or more requirements within particular reliability standard(s), both the JRO and such member(s) or related entity(ies) shall register as an organization responsible for that function. The JRO and its member(s) or related entity(ies) must have a written agreement that clearly

specifies their respective responsibilities, which shall be submitted as part of the joint registration. Neither NERC nor the regional entity shall be parties to any such agreement between a JRO and its member or related entit(ies), nor shall NERC or the regional entity have responsibility for reviewing or approving any such agreement, other than to verify that the agreement provides for an allocation or assignment of responsibilities consistent with the joint registration.

3. NERC or the regional entity may request clarification of any list submitted to it that identifies the compliance responsibilities of the JRO and its member(s) or related entit(ies), and may request such additional information as NERC or the regional entity deems appropriate.
4. The regional entity shall notify NERC of each joint registration that the regional entity accepts. The regional entity's acceptance of a joint registration shall be a representation by the regional entity to NERC that the regional entity has concluded the joint registration will result in (1) no areas lacking any entities to perform the duties and tasks identified in and required by the reliability standards, and (2) no unnecessary duplication of such coverage of areas by entities to perform the duties and task identified in and required by the reliability standards or of required oversight of such coverage.
5. NERC shall maintain, and shall post on its web site, a Joint Registration Organization registry listing all joint registrations that have been accepted by NERC or by a regional entity and the reliability standards or requirements thereof for which each JRO and each of its members or related entities is responsible under the joint registration. The postings on NERC's web site shall clearly identify the compliance responsibilities of the JRO and of each of its member(s) or related entit(ies). Such postings are intended to enable reliability coordinators and other system operators to be fully aware of responsibilities and chains of command in order to respond quickly and decisively to system operation events.
6. Annually following submission of a joint registration, the JRO shall provide the regional entity with a list, in a form specified by the regional entity, that identifies the members or related entities and the functions for which the JRO has registered on behalf of such members or related entities and for which the JRO assumes compliance responsibility. Additionally, a JRO shall provide a revised list of compliance responsibilities to the regional entity each time the JRO accepts additional compliance responsibilities for a member or related entity or for a new member or related entity and each time that any compliance reliability reverts from the JRO to a member or related entity. The regional entity shall promptly notify NERC of each such revision.
7. In the event of a violation of a reliability standard or of a requirement of a reliability standard, the JRO or its member or related entity identified in the Joint Registration Organization registry as responsible for such reliability standard or requirement shall be identified in the notice of alleged violation and shall be assessed the sanction or penalty for the violation. In accordance with the NERC

*Sanctions Guidelines*, for a violation that is attributable to a member or related entity that is registered under the joint registration, the penalty or sanction imposed for the violation will bear reasonable relation to the violation as incurred by that member or related entity and not the JRO. In the event a regional entity is not able to determine, based on the joint registration and the annual or other revised list submitted by the JRO, which entity is responsible for a particular reliability standard or requirement thereof that has been violated, the regional entity shall issue the notice of alleged violation to, and shall impose any sanction or penalty on, the JRO. NERC and the regional entity shall have no responsibility for any allocation or collection of penalties or sanctions between or among the JRO and its member(s) or related entit(ies).

8. **Individual member registration.** Nothing in this Section 507 shall preclude a member of a JRO, a related entity, or any other entity, from registering on its own behalf and undertaking full compliance responsibility, including reporting requirements, for the reliability standards applicable to the function(s) for which the member or other entity is registering. A JRO member or related entity that registers as responsible for any reliability standard or requirement of a reliability standards shall inform the JRO of its registration.

## **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.
  7. No member of the personnel certification program governing body or staff member working with the personnel certification program governing body shall have or exercise any authority or responsibility for compliance matters related to reliability standards concerning personnel certification.

**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 EVALUATION AND IMPROVEMENT**

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

The readiness evaluations 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 evaluations help balancing authorities, transmission operators, reliability coordinators, and others that provide support to these operators recognize and assess their reliability responsibilities and evaluate how their operations support those responsibilities. The evaluation team may also evaluate transmission planner and transmission owner functions in concert with the evaluation of reliability coordinators, balancing authorities, and transmission operators. NERC uses the results of these evaluations to champion the changes required to improve the reliability performance of these entities and achieve excellence in the assigned reliability functions and responsibilities. A companion goal of the program is to identify and promote examples of excellence within the industry.

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 provides guidance to help them achieve operational excellence through the Reliability Readiness Evaluation 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, reliability coordinators, and others that provide support to these operators must be ready to perform under emergency conditions while striving for excellence in their assigned reliability functions and responsibilities.

NERC maintains a reliability readiness evaluation 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 others performing delegated tasks for these operators 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 Evaluation and Improvement Program will coordinate with the sector forums as appropriate to provide input from the readiness evaluations.

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

1. NERC shall have overall responsibility for coordinating readiness evaluations in accordance with the NERC *Readiness Evaluation Procedure*, the current version of which is incorporated into these rules as **Appendix 7**. These rules of procedure take precedence for any conflicts or inconsistencies that exist with the NERC *Readiness Evaluation Procedure*.
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 evaluation activities; (2) initiation of the evaluation process for each entity; (3) provision of evaluation questionnaires, processes, data requests, documentation, and criteria; (4) identification of readiness evaluation team members; (5) coordination of evaluated entity and neighboring entity questionnaires; and (6) publication of findings.
3. The NERC evaluation team shall perform the following functions: (1) review the entity's questionnaire responses and documentation and research any issues or events identified; (2) perform the on-site evaluations; and (3) prepare a report of findings.

**703. Scheduling of Readiness Evaluations**

1. NERC staff in conjunction with the regional entities shall prepare a three-year cycle of readiness evaluations 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 evaluated.
3. Readiness evaluations and compliance audits shall be conducted with separate processes, but may occur concurrently if separate personnel are used.

**704. Resources for Readiness Evaluations**

1. NERC shall select an evaluation team in advance of each evaluation according to a schedule specified by NERC.
2. The evaluation team shall consist of members possessing expertise and experience specified by NERC.
3. The evaluation team shall be of a size and composition specified by NERC.
4. If an entity to be evaluated raises an objection to an evaluation team member's participation, it must do so in writing to NERC stating clearly the basis for the objection. Upon receipt of such objection, the Director of NERC's Readiness Evaluation and Improvement program will attempt to resolve the issue to the mutual agreement of the entity being evaluated and the individual and/or entity for whom the individual is employed, utilizing guidance from the regional entities

as appropriate.

If this process does not result in a mutually acceptable agreement, the Director will resolve the objection based on the following factors:

- a. Team member was previously employed by entity to be evaluated within the previous three years;
  - b. Team member was previously employed by entity to be evaluated and whose employment ended unfavorably;
  - c. Team member is in active litigation with the entity to be evaluated;
  - d. Team member has a direct financial interest in the entity to be evaluated;
  - e. Team member is employed in a company under the same corporate umbrella as the entity to be evaluated;
  - f. The team member's employer and the entity to be evaluated are engaged in active litigation; and
  - g. Other matters that may interfere with the exercise of independent judgment.
5. NERC shall develop and provide training in evaluation skills to all individuals who participate in readiness evaluations. Training for NERC evaluation team leaders and regional entity personnel shall be more comprehensive than training given to industry experts and regional members.
  6. All team members and observers shall sign and abide by a NERC confidentiality agreement prior to participating in any of the evaluation activities unless bound by NERC or other codes of conduct acknowledged by NERC to be acceptable. Copies of the signed confidentiality agreements shall be maintained by NERC and be available upon request by the evaluated entity.
  7. To maintain the focus and size of the evaluation team, the use of observers will be limited. Observers must be expressly agreed upon by both NERC and the entity being evaluated. The role of observers is limited to observing the process. Observers shall not participate in the creation and editing of the report or its findings, or interfere with the evaluation process. The team leader may remove any observer from the evaluation who is not abiding by these criteria.

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

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

1. Prior to an evaluation, 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. In its

submission to the request for information, the entity to be evaluated shall identify all tasks that have been delegated to another entity.

2. NERC shall provide a questionnaire to neighboring operating entities with which the evaluated entity routinely interacts. The neighboring operating entities shall return the completed questionnaires within a period of time specified by NERC.
3. Prior to the evaluation, NERC shall provide an evaluation agenda to the entity to be evaluated.
4. The evaluation team will receive the following information upon receipt of a signed confidentiality agreement according to a schedule specified by NERC.
  - a. The evaluated entity's completed questionnaire and supporting documentation;
  - b. The neighboring operating entities' completed questionnaires; and
  - c. The on-site agenda.
5. The evaluation team will coordinate before the on-site evaluation 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 Evaluation**

1. The evaluation team will meet on-site for a period defined by NERC to conduct the readiness evaluation according to the agenda provided in advance. The team will conduct interviews with personnel, review documentation, and make observations about the entity's tools, facilities, and processes.
2. The team's findings shall be based on data collected from the 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 and to the applicable regional entity for resolution through the applicable Compliance Monitoring and 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 reliability standard will not be identified in the readiness evaluation report.
4. Upon completion of the on-site evaluation, the team shall make a presentation to the evaluated entity of preliminary findings and recommendations that will be included in the final report.

**707. Preparation and Posting of the Final Report**

1. The evaluation team leaders shall prepare a draft report. The report will be sent to the team for review, within a period of time after the evaluation specified by NERC.
2. The evaluation team shall have a period of time specified by NERC to respond to the draft 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 report shall then be sent to the evaluated entity for its review to ensure that there are no factual errors in the report. The entity shall respond within a period of time specified by NERC. If the entity does not respond within the specified time, such non-response shall be considered agreement with the content of the report. The entity may provide feedback in the form of corrections and clarifications that will be considered by the evaluation team for inclusion in the final report.
4. After agreeing on any final corrections, the evaluation team may elect to provide the evaluated entity the opportunity to review the changes if deemed significant. The team shall then post the final report on the NERC Web site within a period of time from the on-site evaluation specified by NERC. Information deemed to be confidential information shall be redacted prior to posting. The entity will make the determination about what information will be redacted.
5. Should the entity wish to provide comments regarding the final report, evaluation processes, or findings, the entity may provide a statement in writing that will be posted on the NERC Web site in conjunction with the final report.
6. In response to the posted evaluation report and within a period of time after the posting specified by NERC, the 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 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.
7. NERC may direct that a mid-cycle follow-up evaluation be scheduled

**708. Monitoring Recommendation Implementation**

1. Evaluated 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 evaluated entity's implementation of the recommendations in the final report and the entity's response plan, and shall



report progress to the board. NERC may elect to use the regional entities to coordinate the request for updated recommendation status for members within its area of oversight.

**709. Examples of Excellence**

NERC shall identify and publish examples of excellence identified during the course of readiness evaluations. “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 evaluation or submitted to NERC for an on-site evaluation.

**710. Confidentiality Requirements for Readiness Evaluations and Evaluation Team Members**

1. All information made available or created during the course of the evaluation including, but not limited to, data, documents, observations and notes, shall be maintained as confidential by all evaluation team members, in accordance with the requirements of Section 1500.
2. Evaluation team members are obligated to destroy all confidential evaluation notes following the posting of the final report.
3. NERC will retain evaluation-related documentation, notes, and materials for a period of time as defined by NERC.

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

1. NERC shall provide for an independent audit of its reliability readiness evaluation 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 evaluation and improvement program in achieving its mission.
3. If the audit report includes recommendations to improve the reliability readiness evaluation and improvement 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 on its Web site. Confidential information shall be redacted according to NERC procedures and not released publicly.

**712. Formation of Sector Forum**

1. NERC will form a sector 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 sector forum may invite such others of the members of NERC to join the sector forum as the sector forum deems appropriate.

2. The request to form a sector forum must include a proposed charter for the sector forum. The board must approve the charter.
3. NERC will provide notification of the formation of a sector forum to its membership roster. Notices and agendas of meetings shall be posted on NERC's Web site.
4. A sector 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) 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 the board or applicable governmental authorities. 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 entities, 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, a critical energy infrastructure information perspective, or for other purposes. Such data shall be treated in accordance with the provisions of Section 1500 – Confidential Information.

While the major sources of data and information for this program are the regional entities and 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 entities or 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 entities or 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 entities or 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** — The teams of reliability and technical experts shall provide an independent assessment of the reliability of the regional entities, regional reliability organizations and the North American interconnected bulk power system for the period of the assessment. While the regional entities or 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 entities or 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.

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.

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.

Upon completion of the assessment, the team shall share the results with the regional entities or regional reliability organizations. The regional entities or 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.

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 analysis 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 evaluation and improvement program.

**807. Analysis of Major Events**

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

- a. 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 entities 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.
- b. 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 activities with them.
- c. During the conduct of some NERC analyses, 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.
- d. 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 with the objective of avoiding, to the extent possible, multiple



investigations of the same event. If the event is confined to a single regional entity, NERC representatives will participate as members of the regional entity analysis team.

- e. NERC and applicable entity(s) 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. In accordance with that procedure, the NERC president will determine whether the event warrants analysis at the NERC-level. A regional entity may request that NERC elevate any analysis to a NERC level.
- f. NERC will screen and analyze the findings and recommendations from the analysis, and those with generic applicability will be disseminated to the industry in accordance with section 810.

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

1. NERC shall analyze system and equipment performance events that do not rise to the level of a major blackout, disturbance, or system emergency, as described in section 807. NERC shall also analyze potential vulnerabilities in the bulk power system brought to its attention by government agencies. The purpose of these analyses is to identify the root causes of events that may be precursors of potentially more serious events or that have the potential to cause more serious events, to assess past reliability performance for lessons learned, and to develop reliability performance benchmarks and trends.
2. NERC will screen and analyze events and potential vulnerabilities for significance, and information from those with generic applicability will be disseminated to the industry in accordance with section 810.

**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 and Issuance of NERC Advisories, Recommendations and Essential Actions**

- 1 Members of NERC and bulk power system owners, operators, and users shall provide NERC with detailed and timely operating experience information and data.

2. In the normal course of operations, NERC disseminates the results of its events analysis findings, lessons learned and other analysis and information gathering to the industry. These findings, lessons learned and other information will be reviewed as part of the readiness evaluation and improvement program and also be used to guide the reliability assessment program.
3. When NERC determines it is necessary to place the industry or segments of the industry on formal notice of its findings, analyses, and recommendations, NERC will provide such notification in the form of specific operations or equipment Advisories, Recommendations or Essential Actions:
  - 3.1 Level 1 (Advisories) – purely informational, intended to advise certain segments of the owners, operators and users of the bulk power system of findings and lessons learned;
  - 3.2 Level 2 (Recommendations) – specific actions that NERC is recommending be considered on a particular topic by certain segments of owners, operators, and users of the bulk power system according to each entity’s facts and circumstances;
  - 3.3 Level 3 (Essential Actions) – specific actions that NERC has determined are essential for certain segments of owners, operators, or users of the bulk power system to take to ensure the reliability of the bulk power system. Such Essential Actions require NERC board approval before issuance.
4. The bulk power system owners, operators, and users to which Level 2 (Recommendations) and Level 3 (Essential Actions) notifications apply are to evaluate and take appropriate action on such issuances by NERC. Such bulk power system owners, operators, and users shall also provide reports of actions taken and timely updates on progress towards resolving the issues raised in the Recommendations and Essential Actions in accordance with the reporting date(s) specified by NERC.
5. NERC will advise the Commission and other applicable governmental authorities of its intent to issue all Level 1 Advisories, Level 2 Recommendations, and Level 3 Essential Actions at least five (5) business days prior to issuance, unless extraordinary circumstances exist that warrant issuance less than five (5) business days after such advice. NERC will file a report with the Commission and other applicable governmental authorities no later than thirty (30) days following the date by which NERC has requested the bulk power system owners, operators, and users to which a Level 2 Recommendation or Level 3 Essential Action issuance applies to provide reports of actions taken in response to the notification. NERC’s report to the Commission and other applicable governmental authorities will describe the actions taken by the relevant owners, operators, and users of the bulk power system and the success of such actions taken in correcting any vulnerability or deficiency that was the subject of the notification, with appropriate protection for confidential or critical infrastructure information.

**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 training to people who participate in NERC and regional entity evaluations, audits, and investigations for the compliance enforcement program, organization certification program, reliability readiness evaluation 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 statutory 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 based on NEL.
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 ERO 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. The NERC annual budget submittal to ERO governmental authorities shall include the following information: (1) budget component justification based on statutory or other authorities; (2) how the budgeted activity lends itself to the accomplishment of the statutory or other authorities; (3) methods of calculating budget estimates; (4) who prioritizes competing needs; (5) how the budget meets the objectives of affordability, sustainability, and efficiency and effectiveness of

expenditures; (6) implementation to meet international standards; (7) transparency; and (8) accountability and execution in accordance with operating plan, performance measures, and shifting priorities.

4. 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 the 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.
2. NERC shall review and approve each regional entity's budget for meeting the requirements of its delegated authority. 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 frequently 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.
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 responsible for funding NERC's activities.
  - 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 their designees 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.

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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.

8. In the case where a Regional Entity performs the collection for ERO, the Regional Entity will not be responsible for non-payment in the event that a user, owner or operator of the Bulk Power System does not pay its share of dues, fees and charges in a timely manner, provided that such a Regional Entity shall use reasonably diligent efforts to collect dues, fees, and other charges from all entities obligated to pay them. However, any revenues not paid shall be recovered from others within the same region to avoid cross-subsidization between regions.
9. 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. Where NERC or a regional entity initiates an investigation that leads to imposition of a penalty, the entity that initiated the investigation shall receive any penalty monies imposed and collected as a result of 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, where sector representation will not bring together the necessary diversity of opinions, technical knowledge and experience in a particular subject area, 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. All committees and other subgroups (except for those organized on other than a sector basis because sector representation will not bring together the necessary diversity of opinions, technical knowledge and experience in a particular subject area) 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. With regard to committees and subgroups pertaining to development of, interpretation of, or compliance with standards, NERC shall provide a reasonable opportunity for membership from sectors desiring to participate. Committees and subgroups organized on other than a sector basis shall be reported to the NERC board and the Member Representatives Committee, along with the reasons for constituting the committee or subgroup in the manner chosen. In such cases and subject to reasonable restrictions necessary to accomplish the mission of such committee or subgroup, NERC shall provide a reasonable opportunity for additional participation, as members or official observers, for sectors not represented on the committee or subgroup.

### **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.

### **1403. Alternative Procedure for Violation Risk Factors**

In the event the standards development process fails to produce violation risk factors for a particular standard in a timely manner, the Board of Trustees may adopt violation risk factors for that standard after notice and opportunity for comment. In adopting violation risk factors, the board shall consider the inputs of the Member Representatives Committee and affected stakeholders.



## SECTION 1500 — CONFIDENTIAL INFORMATION

### 1501. Definitions

1. **Confidential information** means (i) confidential business and market information; (ii) critical energy infrastructure information; (iii) personnel information that identifies or could be used to identify a specific individual, or reveals personnel, financial, medical, or other personal information; (iv) work papers, including any records produced for or created in the course of an evaluation or audit; (v) investigative files, including any records produced for or created in the course of an investigation; or (vi) cybersecurity incident information; provided, that public information developed or acquired by an entity shall be excluded from this definition.
2. **Confidential business and market information** means any information that pertains to the interests of any entity, that was developed or acquired by that entity, and that is proprietary or competitively sensitive.
3. **Critical energy infrastructure information** means information about proposed or existing critical infrastructure that (i) relates to the production, generation, transportation, transmission, or distribution of energy; (ii) could be useful to a person in planning an attack on critical infrastructure; and (iii) does not simply give the location of the critical infrastructure. Additional guidance is available in *NERC Security Guidelines for the Electricity Sector — Protecting Potentially Sensitive Information*.
4. **Critical infrastructure** means existing and proposed systems and assets, whether physical or virtual, the incapacity or destruction of which would negatively affect security, economic security, public health or safety, or any combination of those matters.
5. **Cybersecurity incident information** means any information related to, describing, or which could be used to plan or cause a cybersecurity incident as defined in 18 C.F.R. § 39.1.

### 1502. Protection of Confidential Information

1. **Identification of Confidential Information** — An owner, operator, or user of the bulk power system and any other party (the “submitting entity”) shall mark as confidential any information that it submits to NERC or a regional entity (the “receiving entity”) that it reasonably believes contains confidential information as defined by these rules, indicating the category or categories defined in Section 1501 in which the information falls. If the information is subject to a prohibition on public disclosure in the Commission-approved rules of a regional transmission organization or independent system operator or a similar prohibition in applicable federal, state, or provincial laws, the submitting entity shall so indicate and provide supporting references and details.

2. **Confidentiality** — Except as provided herein, a receiving entity shall keep in confidence and not copy, disclose, or distribute any confidential information or any part thereof without the permission of the submitting entity, except as otherwise legally required.
3. **Information no longer Confidential** – If a submitting entity concludes that information for which it had sought confidential treatment no longer qualifies for that treatment, the submitting entity shall promptly so notify NERC or the relevant regional entity.

### **1503. Requests for Information**

1. **Limitation** — A receiving entity shall make information available only to one with a demonstrated need for access to the information from the receiving entity.
2. **Form of Request** — A person with such a need may request access to information by using the following procedure:
  - 2.1 The request must be in writing and clearly marked “Request for Information.”
  - 2.2 The request must identify the individual or entity that will use the information, explain the requester’s need for access to the information, explain how the requester will use the information in furtherance of that need, and state whether the information is publicly available or available from another source or through another means. If the requester seeks access to information that is subject to a prohibition on public disclosure in the Commission-approved rules of a regional transmission organization or independent system operator or a similar prohibition in applicable federal, state, or provincial laws, the requester shall describe how it qualifies to receive such information.
  - 2.3 The request must stipulate that, if the requester does not seek public disclosure, the requester will maintain as confidential any information received for which a submitting party has made a claim of confidentiality in accordance with NERC’s rules. As a condition to gaining access to such information, a requester shall execute a non-disclosure agreement in a form approved by NERC’s board of trustees.
3. **Notice and Opportunity for Comment** — Prior to any decision to disclose information marked as confidential, the receiving entity shall provide written notice to the submitting entity and an opportunity for the submitting entity to either waive objection to disclosure or provide comments as to why the confidential information should not be disclosed. Failure to provide such comments or otherwise respond is not deemed waiver of the claim of confidentiality.

4. **Determination by ERO or Regional Entity** — Based on the information provided by the requester under Rule 1503.2, any comments provided by the submitting entity, and any other relevant available information, the chief executive officer or his or her designee of the receiving entity shall determine whether to disclose such information.
5. **Appeal** — A person whose request for information is denied in whole or part may appeal that determination to the President of NERC (or the President's designee) within 30 days of the determination. Appeals filed pursuant to this Rule must be in writing, addressed to the President of NERC (or the President's designee), and clearly marked "Appeal of Information Request Denial."

NERC will provide written notice of such appeal to the submitting entity and an opportunity for the submitting entity to either waive objection to disclosure or provide comments as to why the confidential information should not be disclosed; provided that any such comments must be received within 30 days of the notice and any failure to provide such comments or otherwise respond is not deemed a waiver of the claim of confidentiality.

The President of NERC (or the President's designee) will make a determination with respect to any appeal within 30 days. In unusual circumstances, this time limit may be extended by the President of NERC (or the President's designee), who will send written notice to the requester setting forth the reasons for the extension and the date on which a determination on the appeal is expected.

6. **Disclosure of Information** — In the event the receiving entity, after following the procedures herein, determines to disclose information designated as confidential information, it shall provide the submitting entity no fewer than 21 days' written notice prior to releasing the information in order to enable such submitting entity to (a) seek an appropriate protective order or other remedy, (b) consult with the receiving entity 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 Rule. Should a receiving entity be required to disclose confidential information, or should the submitting entity waive objection to disclosure, the receiving entity shall furnish only that portion of the confidential information which the receiving entity's counsel advises is legally required.

#### **1504. Employees, Contractors and Agents**

A receiving entity 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.

#### **1505. Provision of Information to FERC and Other Governmental Authorities**

1. **Request** — A request from FERC for reliability information with respect to owners, operators, and users of the bulk power system within the United States is

authorized by Section 215 of the Federal Power Act. Other applicable ERO governmental authorities may have similar authorizing legislation that grants a right of access to such information. Unless otherwise directed by FERC or its staff or the other ERO governmental authority requesting the information, upon receiving such a request, a receiving entity shall provide contemporaneous notice to the applicable submitting entity. In its response to such a request, a receiving entity shall preserve any mark of confidentiality and shall notify FERC or other appropriate governmental authorities that the submitting entity has marked the information as confidential.

2. **Continued Confidentiality** — Each receiving entity shall continue to treat as confidential all confidential information that it has submitted to NERC or to FERC or another appropriate ERO governmental authority, until such time as FERC or the other appropriate ERO governmental authority authorizes disclosure of such information.

#### **1506. Permitted Disclosures**

1. **Confirmed Violations** — Nothing in this Section 1500 shall prohibit the disclosure of a violation at the point when the matter is filed with an appropriate governmental authority as a notice of penalty, the “violator” admits to the violation, or the alleged violator and NERC or the regional entity reach a settlement regarding the violation.
2. **Compliance Information** — NERC and the regional entities are authorized to exchange confidential information related to evaluations, audits, and investigations in furtherance of the compliance and enforcement program, on condition they continue to maintain the confidentiality of such information.

#### **1507. Remedies for Improper Disclosure**

Any person engaged in NERC or regional entity activity under section 215 of the Federal Power Act or the equivalent laws of other appropriate governmental authorities who improperly discloses information determined to be confidential may lose access to confidential information on a temporary or permanent basis and may be subject to adverse personnel action, including suspension or termination. Nothing in Section 1500 precludes an entity whose information was improperly disclosed from seeking a remedy in an appropriate court.

## **SECTION 1600 — REQUESTS FOR DATA OR INFORMATION**

### **1601. Scope of a NERC or Regional Entity Request for Data or Information**

Within the United States, NERC and regional entities may request data or information that is necessary to meet their obligations under Section 215 of the Federal Power Act, as authorized by Section 39.2(d) of the Commission’s regulations, 18 C.F.R. § 39.2(d). In other jurisdictions NERC and regional entities may request comparable data or information, using such authority as may exist pursuant to these rules and as may be granted by applicable governmental authorities in those other jurisdictions. The provisions of Section 1600 shall not apply to requirements contained in any Reliability Standard to provide data or information; the requirements in the Reliability Standards govern. The provisions of Section 1600 shall also not apply to data or information requested in connection with a compliance or enforcement action under Section 215 of the Federal Power Act, Section 400 of these Rules of Procedure, or any procedures adopted pursuant to those authorities, in which case the Rules of Procedure applicable to the production of data or information for compliance and enforcement actions shall apply.

### **1602. Procedure for Authorizing a NERC Request for Data or Information**

1. NERC shall post a proposed request for data or information or a proposed modification to a previously authorized request for data or information for a forty-five (45) day public comment period.
  - 1.1. A proposed request for data or information shall contain, at a minimum, the following information: (i) a description of the data or information to be requested, how the data or information will be used, and how the availability of the data or information is necessary for NERC to meet its obligations under applicable laws and agreements; (ii) a description of how the data or information will be collected and validated; (iii) a description of the entities (by functional class and jurisdiction) that will be required to provide the data or information (“reporting entities”); (iv) the schedule or due date for the data or information; (v) a description of any restrictions on disseminating the data or information (e.g., “confidential,” “critical energy infrastructure information,” “aggregating” or “identity masking”); and (vi) an estimate of the relative burden imposed on the reporting entities to accommodate the data or information request.
  - 1.2. A proposed modification to a previously authorized request for data or information shall explain (i) the nature of the modifications; (ii) an estimate of the burden imposed on the reporting entities to accommodate the modified data or information request, and (iii) any other items from paragraph 1.1 that require updating as a result of the modifications.
2. After the close of the comment period, NERC shall make such revisions to the proposed request for data or information as are appropriate in light of the comments.

NERC shall submit the proposed request for data or information, as revised, along with the comments received, NERC's evaluation of the comments and recommendations, to the Board of Trustees.

3. In acting on the proposed request for data or information, the Board of Trustees may authorize NERC to issue it, modify it, or remand it for further consideration.
4. NERC may make minor changes to an authorized request for data or information without board approval. However, if a reporting entity objects to NERC in writing to such changes within 21 days of issuance of the modified request, such changes shall require board approval before they are implemented.
5. Authorization of a request for data or information shall be final unless, within thirty (30) days of the decision by the Board of Trustees, an affected party appeals the authorization under this Section 1600 to the applicable governmental authority.

### **1603. Owners, Operators, and Users to Comply**

Owners, operators, and users of the bulk power system registered on the NERC Compliance Registry shall comply with authorized requests for data and information.

### **1604. Requests by Regional Entity for Data or Information**

A regional entity may request that NERC seek authorization for a request for data or information to be applicable within the footprint of the regional entity, either as a freestanding request or as part of a proposed NERC request for data or information. Any such request must be consistent with this Section 1600. The regional entity may also develop its own procedures for requesting data or information, but any such procedures must include at least the same procedural elements as are included in this Section 1600.

### **1605. Confidentiality**

If the approved data or information request includes a statement under Section 1602.1.1(v) that the requested data or information will be held confidential or treated as critical energy infrastructure information, then the applicable provisions of Section 1500 will apply without further action by a submitting entity. A submitting entity may designate any other data or information as confidential pursuant to the provisions of Section 1500, and NERC or the regional entity shall treat that data or information in accordance with Section 1500. NERC or a regional entity may utilize additional protective procedures for handling particular requests for data or information as may be necessary under the circumstances.

## **Appendix 3A**

# **Reliability Standards Development Procedure**

**Version 6.1 — Approved: NERC Board of Trustees**

**March 12, 2007**

**Effective: June 7, 2007**

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## **Introduction**

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### ***Purpose***

This procedure defines the characteristics of a reliability standard of the North American Electric Reliability Corporation (NERC) and establishes the process for development of consensus for approval, revision, reaffirmation, and withdrawal of such standards. NERC reliability standards apply to the reliability planning and reliable operation of the bulk power systems of North America.

### ***Authority***

This procedure is published by the authority of the NERC Board of Trustees. The Board of Trustees, as necessary to maintain NERC's certification as the electric reliability organization (ERO), may file the procedure with applicable governmental authorities for approval as an ERO procedure. When approved, the procedure is appended to and provides implementation detail in support of the ERO Rules of Procedure Section 300 — Reliability Standards Development. A process for revising the procedure, including the role of stakeholders in modifying the procedure, is provided in the section titled Maintenance of Reliability Standards Development Procedure.

### ***Background***

NERC is a nonprofit corporation formed for the purpose of becoming the North American electric reliability organization. NERC's predecessor organization, the North American Electric Reliability Council, was formed in 1968 as a result of the Northeast blackout in 1965 to promote the reliability of the bulk power systems of North America.

NERC works with all stakeholder segments of the electric industry, including electricity users, to develop standards for the reliability planning and reliable operation of the bulk power systems. Historically, NERC standards were effectively applied on a voluntary basis. In the United States, the Energy Policy Act of 2005 added Section 215 to the Federal Power Act for the purpose of establishing a framework to make the standards mandatory for all bulk power system owners, operators, and users. Similar authorities are provided by applicable governmental authorities in Canada. NERC was certified as the electric reliability organization effective July 2006.

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

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### ***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. The reliability and market interface principles are listed in Appendix A in the Standard Authorization Request template.

### ***Reliability Principles***

NERC reliability standards are based on certain reliability principles that define the foundation of reliability for North American bulk power 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 power 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 power 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

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### ***Definition of a Reliability Standard***

A reliability standard defines certain obligations or requirements of entities that operate, plan, and use the bulk power 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. A reliability standard is defined as follows:

“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<sup>1</sup>.

### ***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.

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 power 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 power 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 the development and revision of reliability standards. This discipline is necessary to achieving 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.

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<sup>1</sup> § 39.1 Code of Federal Regulations.

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>Applicability</b>	Clear identification of the functional classes of entities responsible for complying with the standard, noting any specific additions or exceptions.  If not applicable to the entire North American bulk power system, then a clear identification of the portion of the bulk power system to which the standard applies, such as a region or interconnection. Any limitation on the applicability of the standard based on electric facility requirements should be described.
<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. The purpose 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>Requirement(s)</b>	Explicitly stated technical, performance, preparedness, or certification 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>	The potential reliability significance of each requirement, designated as a High, Medium, or Lower Risk Factor in accordance with the criteria listed below:  A High Risk Factor requirement (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.  A Medium Risk Factor requirement (a) is a requirement that, if violated, could

	<p>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, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.</p> <p>A Lower Risk Factor requirement is administrative in nature and (a) is a requirement that, if violated, would not be 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; or (b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.</p>
<b>Measure(s)</b>	<p>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.</p>

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

<b>Definitions of Terms</b>	<p>All defined terms used in reliability standards shall be defined in the glossary. Definitions may be approved as part of a standard action or as a separate action. All definitions must be approved in accordance with the standards process.</p>
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***Compliance Elements<sup>2</sup> of a Standard***

<b>Compliance Monitoring Process</b>	<p>The following compliance elements, which are part of the standard and are balloted with the standard are developed for each measure in a standard by the NERC compliance program in coordination with the standard drafting team:</p>
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<sup>2</sup> While the compliance elements of a standard are developed and approved for each NERC standard, the compliance elements will not be included in any standard submitted to ANSI for approval as an American National Standard.

	<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>
<b>Violation Severity Levels</b>	Defines the degree to which compliance with a requirement was not achieved. The violation severity levels, are part of the standard and are balloted with the standard, and developed by the NERC compliance program in coordination with the standard drafting team.

***Supporting Information Elements***

<b>Interpretations</b>	Formally approved interpretations of the reliability standard. Interpretations are temporary, as the standard should be revised to incorporate the interpretation. Interpretations are developed and approved through a process described in the section Interpretations of Standards.
<b>Implementation Plan</b>	Each standard shall have an associated implementation plan describing the effective date of the standard or effective dates if there is a phased implementation. The implementation plan may also describe the implementation of the standard in the compliance program and other considerations in the initial use of the standard, such as necessary tools, training, etc. The implementation plan must be posted for at least one public comment period and is approved as part of the ballot of the standard.
<b>Supporting References</b>	<p>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:</p> <ul style="list-style-type: none"> <li>• Developmental history of the standard and prior versions.</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> </ul>

	<ul style="list-style-type: none"><li>• White papers.</li><li>• Internet links to related information.</li></ul>
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## Roles in the Reliability Standards Development Process

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### ***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 power 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.

**Member Representatives Committee** — The NERC Member Representatives 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<sup>3</sup>. 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 or individuals that:

1. Qualify for one of the stakeholder segments approved by the Board of Trustees<sup>4</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.

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<sup>3</sup> In addition to balanced stakeholder segment representation, the Standards Committee shall also have representation that is balanced among countries based on net energy for load (NEL). As needed, the Board of Trustees may approve special procedures for the balancing of representation among countries represented within NERC.

<sup>4</sup> Appendix B contains a description of the latest version of the stakeholder segments approved by the Board of Trustees.

**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.

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 SAR drafting teams and standard drafting teams.

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

- Initiate standards actions by developing SARs.
- Submit comments (views and objections) to standards actions.
- Participate on standard drafting teams.
- Provide guidance in the development and implementation of field tests.
- Assist in the implementation of approved standards.
- Serve as industry spokespersons by encouraging others within their NERC region and stakeholder segment to participate in the standards development process.
- Serve as industry monitors to assess the impact of a standard's implementation.
- Provide technical oversight in response to changing industry conditions.
- 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, 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. The compliance elements specific to each standard will be developed by the compliance program, in conjunction with the standards development process.

**SAR Drafting Team** — A team of technical experts assigned by the Standards Committee, 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, or whether joint development is needed. The JIC will also coordinate the annual work plans of the three organizations.

## Reliability Standards Consensus Development Process

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### 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 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>5</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. 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 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 within ten days of the Standards Committee's action regarding the reasons for the remand of the SAR.
- Accept the SAR as a candidate for a new or revised standard, and authorize posting of 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.

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<sup>5</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.

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 requester'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 the development of 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 the 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 within ten days and the requester may initiate an appeal using the appeals procedure.

During the SAR comment process, the requester or SAR drafting team may become aware of potential regional variances related to the proposed standard. To the extent possible, any regional variances 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 development of the standard 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, 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.
- Reject the SAR with a written explanation to the requester and post that explanation.

If the Standards Committee rejects a SAR, the requester may initiate 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 the time the standard is authorized for development, 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. Self-nominations shall be acceptable. Those individuals who are nominated 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 the drafting of the standard.

The Standards Committee may, in lieu of an open nomination, 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 requester 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 development of 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 30-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 the scope of the standard be reduced 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 requester 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 requester 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 of 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 committees or other experts, and as applicable, request the assistance of the compliance organization to conduct and evaluate the field test.

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

Based on comments received, the standard 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 standard 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 standard 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, responses to the comments, and a summary of minority views. 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 and recommendations of the standards process manager to ensure that the proposed standard is consistent with the scope of the SAR; addresses all of the objectives and requirements cited in Steps 1 to 8, as applicable; has an implementation plan; 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 earlier 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 minimum 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>6</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 voting affirmative or negative 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<sup>7</sup> will be used to determine if a two-thirds majority has been achieved. (A segment will be

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<sup>6</sup> If a quorum of the ballot pool is not established, the standard will be balloted a second time, allowing a 15-business 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 for ballot pool formation. A re-ballot of the standard will take place with the revised standard ballot pool.

<sup>7</sup> When less than ten entities vote in a segment, the total weight for that segment shall be determined as one tenth per entity voting, up to ten.

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.

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.

### **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 Member Representatives 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.

Once the board has approved a reliability standard, the board will direct the standard to be filed with applicable governmental authorities in the United States, Canada, and Mexico for approval.

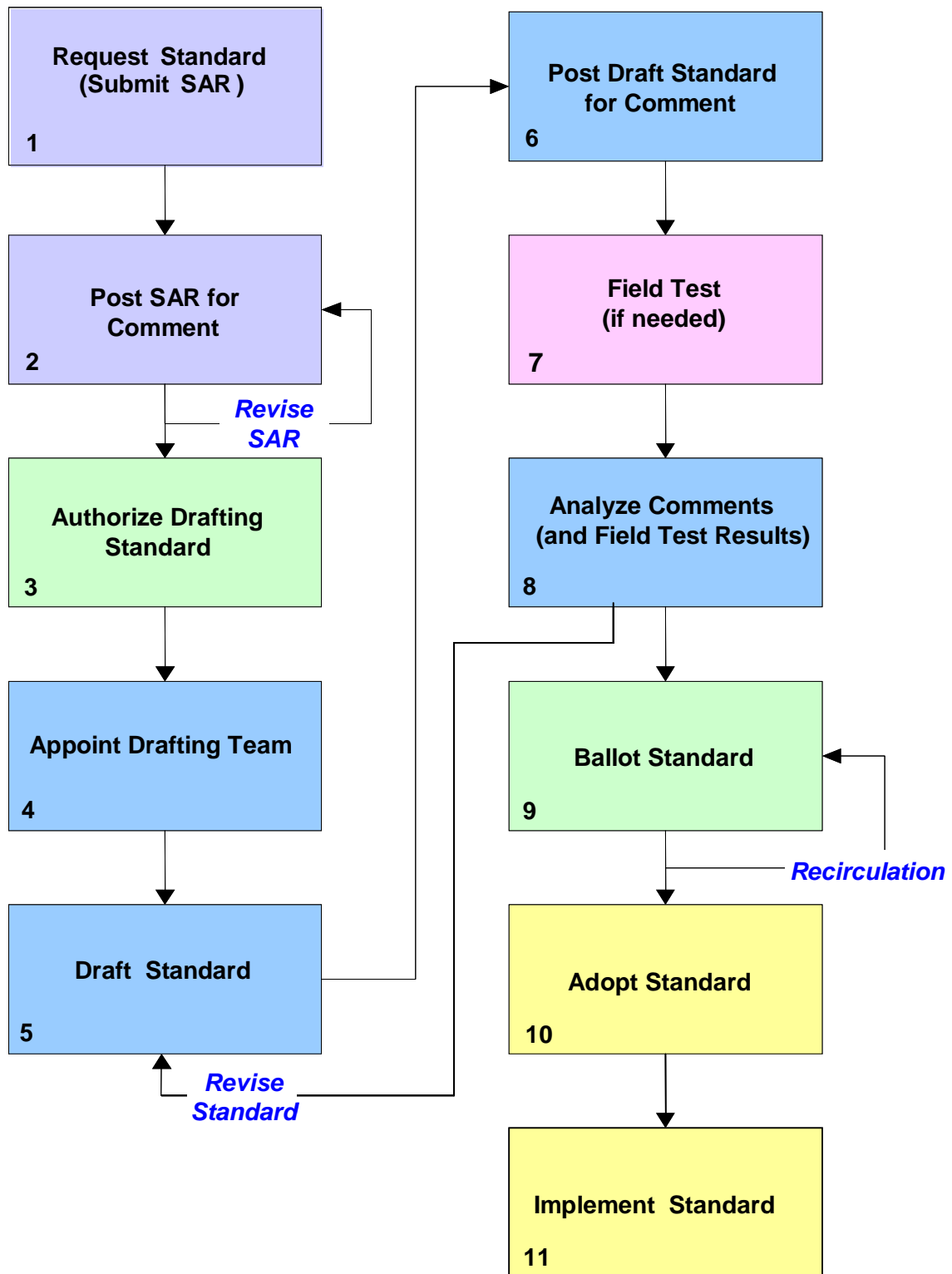
### **Step 11 — Implementation of Reliability Standard**

*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 defined in the standard implementation plan.*

Once a reliability standard is approved or otherwise made mandatory by applicable governmental authorities, all persons and organizations subject to the reliability jurisdiction are required to comply with the standard in accordance with applicable statutes, regulations, and agreements. After approval of a reliability standard by the applicable governmental authorities, the standard will be forwarded to the compliance program for compliance monitoring and enforcement.

**Process Diagram**



## Special Procedures

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### *Urgent and Emergency 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 the reliability or security of the bulk power systems or be inconsistent with statutory or regulatory requirements for reliability standards, such as by causing adverse impacts on markets or undue discrimination. 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 both 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 pre-ballot draft. This posting requires a minimum 30-day posting period before the ballot and applies the same voting procedure as described in Step 9.

After making a written finding that an extraordinary and immediate threat exists to bulk power system reliability or National security, the NERC board shall have the discretion to take the following emergency actions to further expedite the urgent action procedure described above:

- Reduce or suspend the 30-day pre-ballot review of a proposed emergency standard.
- Reduce the time period for voting by stakeholders to 5 days for the initial ballot, and if necessary 5 days for the recirculation ballot.

If a standard is adopted through an urgent or emergency action, one of the following three actions must occur:

- If the urgent or emergency action standard is to be made permanent without substantive changes, then the standard must proceed through the regular standards development process to be balloted by stakeholders within one year of the urgent or emergency action approval by stakeholders.
- If the urgent or emergency action standard is to be substantively revised or replaced by a new standard, then a request for the new or revised standard must be initiated as soon as practical after the urgent or emergency action ballot and the standard must proceed through the regular standards development process to be balloted by stakeholders as soon as practical within two years of the urgent or emergency action approval by stakeholders.
- The urgent or emergency action standard may be withdrawn through the regular process by a ballot of the stakeholders within two years.

### *Interpretations of Standards*

All persons who are directly and materially affected by the reliability of the North American bulk power 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 shall be filed with the applicable regulatory authorities and becomes effective when approved by those regulatory authorities. 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.

### ***Variances to 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 a need for a variance based on a physical difference in the bulk power system.

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 described below:

- **Entity Variance** — 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.
- **Regional Variance 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 shall be permitted to vote; and the variance shall be made part of the applicable NERC reliability standard.
- **Regional Variance 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.

Variances should be identified and considered when a SAR is posted for comment. Variances should also be considered in the drafting of a standard, with the intent to make any necessary variances a part of the

initial development of a standard. The public posting allows for all impacted parties to identify the requirements of a NERC reliability standard that might require a variance.

### ***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 to the standards process manager a complaint in writing 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.

## **NERC Reliability Standards Development Procedure**

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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

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### ***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 requester 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 further comment;
- 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 4)

- Authority (page 4)
- Definition of a Reliability Standard (page 6)
- Characteristics of a Reliability Standard (page 6)
- Elements of a Reliability Standard (page 6)
- Registered Ballot Body (page 11)
- Ballot Pool (page 12)
- Committees, Subcommittees, Working Groups, and Task Forces (page 12)
- Reliability Standards Consensus Development Process (page 14)
- Step 9 — Ballot the New or Revised Standard (pages 21–23)
- Step 10 — Adoption of the Reliability Standard by the Board (pages 23–24)
- Urgent and Emergency Actions (page 26)
- Variances to NERC Reliability Standards (page 27)
- Regional Reliability Standards (This section was removed from Version 6 because it is covered in the ERO rules.)
- Criteria for regional variances (pages 25–26)
- Appeals (pages 28–29)
- Process Revisions (pages 30–31)
- Registration Procedures (page 39)
- Segment Qualification Guidelines (pages 39–40)
- Segments (pages 40–41)

### ***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. 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.

### ***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. 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.

### ***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 standard process manager shall recommend to the Standards Committee a schedule and plan for the five-year review of reliability standards.

The Standards Committee shall, using the drafting team procedures described previously, appoint one or more review teams of technical experts. As a result of this review, each review team shall recommend and provide justification to the Standards Committee that the reliability standard should be reaffirmed, revised, or withdrawn. The review team shall post its recommendations for public comment and provide the public comments to the Standards Committee for consideration.

The Standards Committee may, upon review of the documentation supporting the justification, accept a recommendation to reaffirm the standard. The reaffirmation shall be submitted to the Board of Trustees for approval. In the case of reaffirmation of a standard, the standard will remain in effect until the next five-year review or until the standard is otherwise modified or withdrawn by a separate action. Reaffirmation does not require approval by stakeholder ballot, although reaffirmation does not preclude any person or entity from requesting to modify or withdraw a standard at any time by submitting a SAR into the regular process.

If the review team recommends a standard should be modified or withdrawn, the team shall initiate a SAR with such a proposal and the SAR shall be acted upon in accordance with this standards development procedure. Each existing standard recommended for modification or withdrawal shall remain in effect until the action to modify or withdraw the standard is approved by a ballot of the stakeholders, the Board of Trustees, and any applicable governmental authorities.

### ***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, for at a minimum 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

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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 in the standard development process. 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.

The Standards Committee shall authorize the posting of all supporting references to be posted with or referenced from the standards. This does not imply the Standards Committee must approve each such reference or its contents. Such authorization may be granted at any time during the development or implementation of the standard.

Type of Document	Description
Implementation Plan	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.
Reference	Descriptive, technical information or analysis or explanatory information to support the understanding and interpretation of a reliability standard. A standard reference may support the implementation of a reliability standard or satisfy another purpose consistent with the reliability and market interface principles.
Supplement	Data forms, pro forma documents, and associated instructions that support the implementation of a reliability standard.
Training Material	Training materials that may support the implementation of a reliability standard or satisfy another purpose consistent with the reliability and market interface principles.
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.
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.



## Appendix A — Information in a Standard Authorization Request

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The table below provides a representative example<sup>8</sup> of information in a Standard Authorization Request. The standards process manager shall be responsible for implementing and maintaining a form similar to this template, as needed to support the information requirements of the standards process.

### Standard Authorization Request Form

Title of Proposed Standard:
Request Date:

#### **SAR Requester Information**

Name:	<b>SAR Type (Check one box.)</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

<b>Purpose</b> (Describe the purpose of the proposed standard – what the standard will achieve in support of reliability.)
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<b>Industry Need</b> (Provide a detailed statement justifying the need for the proposed standard, along with any supporting documentation.)
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<sup>8</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</b> (Check all applicable boxes.)		
<input type="checkbox"/>	Reliability Coordinator	The entity that is the highest level of authority who is responsible for the reliable operation of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and real-time operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator's vision.
<input type="checkbox"/>	Balancing Authority	The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.
<input type="checkbox"/>	Interchange Authority	Authorizes valid and balanced Interchange Schedules.
<input type="checkbox"/>	Planning Authority	The responsible entity that coordinates and integrates transmission facility and service plans, resource plans, and protection systems.
<input type="checkbox"/>	Transmission Service Provider	The entity that administers the transmission tariff and provides Transmission Service to Transmission Customers under applicable transmission service agreements.
<input type="checkbox"/>	Transmission Owner	The entity that owns and maintains transmission facilities.
<input type="checkbox"/>	Transmission Operator	The entity responsible for the reliability of its "local" transmission system, and that operates or directs the operations of the transmission facilities.
<input type="checkbox"/>	Transmission Planner	The entity that develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within its portion of the Planning Authority Area.
<input type="checkbox"/>	Resource Planner	The entity that develops a long-term (generally one year and beyond) plan for the resource adequacy of specific loads (customer demand and energy requirements) within a Planning Authority Area.
<input type="checkbox"/>	Generator Operator	The entity that operates generating unit(s) and performs the functions of supplying energy and Interconnected Operations Services.
<input type="checkbox"/>	Generator Owner	Entity that owns and maintains generating units.
<input type="checkbox"/>	Purchasing-Selling Entity	The entity that purchases or sells, and takes title to, energy, capacity, and Interconnected Operations Services. Purchasing-Selling Entities may be affiliated or unaffiliated merchants and may or may not own generating facilities.

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<input type="checkbox"/>	Distribution Provider	Provides and operates the “wires” between the transmission system and the customer.
<input type="checkbox"/>	Load-Serving Entity	Secures energy and transmission service (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.

***Reliability and Market Interface Principles***

<b>Applicable Reliability Principles</b> (Check all boxes that apply.)	
<input type="checkbox"/>	1. Interconnected bulk power 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 power 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 power 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 power 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 power systems.
<input type="checkbox"/>	6. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions.
<input type="checkbox"/>	7. The reliability of the interconnected bulk power systems shall be assessed, monitored, and maintained on a wide-area basis.
<input type="checkbox"/>	8. Bulk power systems shall be protected from malicious physical or cyber attacks.
<b>Does the proposed Standard comply with all of the following Market Interface Principles?</b> (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>

**Regional Variances**

<b>Region</b>	<b>Explanation</b>
ERCOT	
FRCC	
MRO	
NPCC	
RFC	
SERC	
SPP	
WECC	

## Appendix B — Development of the Registered Ballot Body<sup>9</sup>

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### ***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.

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 reliability of the bulk power system 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:

- 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.
- At any given time, affiliated entities may collectively be registered only once within a segment.
- Any person or entity, such as a consultant or vendor, providing products or services related to bulk power system reliability within the previous 12 months to another entity eligible to join Segments 1 to 7 shall be qualified to join any one segment for which one of the entities receiving those products or services is qualified to join.
- Corporations, organizations, and entities may participate freely in all subgroups.
- After their initial selection, registered participants may apply to change segments annually, according to a defined schedule.

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<sup>9</sup> The segment qualification guidelines were proposed in the final report of the NERC Standing Committees Representation Task Force on February 7, 2002. The Board of Trustees endorsed the industry segments and weighted segment voting model on February 20, 2002 and may change the model from time to time. The latest version (approved or endorsed by the NERC Board of Trustees) shall be used in the NERC Reliability Standards Development Procedure.

- 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.
- Since all balloting of standards will be done electronically, any registered participant may designate a proxy to vote on its behalf. There are no limits on how many proxies a person may hold. However, NERC must have in its possession, either in writing or by email, documentation that the voting right by proxy has been transferred.

### **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 join to Segment 2).

#### **Segment 2. Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs)**

- a. Any entity authorized by appropriate governmental authority to operate as an RTO or ISO.

#### **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, contractual, or other legal obligation to serve wholesale aggregators or customers 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 currently employed by an entity that is eligible to join one or more of the other eight segments, shall not be qualified to join Segment 8.

**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.

**Segment 10. Regional Reliability Organizations and Regional Entities**

- a. Any entity that is a regional reliability organization or regional entity, as defined in NERC's Bylaws. It is recognized that there may be instances in which an entity is both an RTO or ISO and a regional entity or regional reliability organization. In such a case, the two functions must be sufficiently independent to meet NERC's Rules of Procedure and applicable regulatory requirements, as evidenced by the approval of a regional entity delegation agreement. Without such an approval, the entity shall be limited to choosing to enter one segment or the other, but not both.

## 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 and ISOs	10	10	8
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
10. RROs and REs	10	10	8
<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	10	8	0.800	2	0.200	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
10	10	7	0.700	3	0.300	0	0
<b>Totals</b>	<b>496</b>	<b>346</b>	<b>5.491</b>	<b>116</b>	<b>2.509</b>	<b>18</b>	<b>16</b>
<b>Ballots</b>	<b>480</b>	<b>96.8%</b>					
<b>Wtd Vote</b>			<b>0.686</b>		<b>0.314</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  
 $= (480/496) \times 100$   
 $= 96.8\%$

Weighted segment vote  
 $= (\text{Total Fraction}) / (\text{Segments Counted})$   
 $= 5.491 / 8$

Trustees Approved:  
 March 12, 2007  
 Effective: June 7, 2007



**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	8	6	.8*0.750	2	.8*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	
6	10	6	0.600	4	0.400	0	
7	4	4	.4*1.000	0	.4*0.000	0	
8	5	5	.5*1.000	0	.5*0.000	0	
9	15	7	.7*1.000	0	.7*0.000	5	
10	8	8	.8*1.000	0	.8*0.000	0	0
<b>Total</b>	<b>275</b>	<b>134</b>	<b>6.816</b>	<b>36</b>	<b>1.384</b>	<b>7</b>	<b>98</b>
<b>Ballots</b>	<b>177</b>	<b>64.36%</b>					
<b>Wtd Vote</b>			<b>0.831</b>		<b>0.169</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 due to lack of a quorum.

Segments with less than 10 votes (affirmative or negative) are discounted such that each vote counts 0.1 of the segment weight.

6.816/8.2 = .802 or 82.2 % approval. Denominator is reduced because Segment 2 counts .8; 7 counts 0.4; Segment 8 counts 0.5; Segment 9 counts 0.7; and Segment 10 counts .8.

# NERC

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

## **Appendix 3B**

# **Election Procedure for Members of NERC Standards Committee**

**Effective January 18, 2007**

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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.

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# NERC

NORTH AMERICAN ELECTRIC  
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## **Appendix 3C**

# **Procedure for Coordinating Reliability Standards Approvals, Remands, and Directives**

**Effective January 18, 2007**

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## Introduction

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### ***Purpose***

This procedure describes steps for coordinating actions on reliability standards proposed by the electric reliability organization (ERO) among the various relevant federal and provincial governmental authorities in North America<sup>1</sup>. This procedure also applies to governmental authority directives to develop or modify reliability standards.

The goals of coordinating these activities are:

- To ensure that reliability standards are applied consistently and concurrently to all bulk power system owners, operators, and users across North America, so as to preserve reliability and avoid undue discrimination.
- To avoid and resolve disagreements regarding the approval, effective date, or remand of a proposed reliability standard, or a directive to develop or modify a standard.

### ***Importance of the Stakeholder Process***

The challenge of coordinating approvals, directives, and remands of reliability standards among sovereign federal and provincial governments in the United States, Canada and, in time, Mexico underscores the paramount importance of granting due weight to the expertise of the industry and NERC in the development of reliability standards. Adopting standards as proposed by the ERO and the industry ensures that a single set of standards will be consistently applied across the various jurisdictions. At the same time, each governmental authority preserves its authorities and responsibilities established by the statutes and regulations applicable in each jurisdiction.

### ***Principles of Coordination in the Development of Standards***

Adherence to the following principles will promote effective coordination of standards actions among the various relevant governmental authorities.

NERC proposes that each relevant governmental authority:

- Share with each other respective authority and the ERO its policies and objectives for the development of standards to protect the reliability of the bulk power system.
- Share with each other respective authority and the ERO, as early as possible, any concerns it may have with a particular reliability standard, proposed or existing.
- Seek to actively participate in the stakeholder process for developing reliability standards, without compromising its oversight role and authority.

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<sup>1</sup> In its July 20, 2006 order certifying NERC as the electric reliability organization, the United States Federal Energy Regulatory Commission directed NERC to revise its proposed coordination process to: (1) identify the relevant regulatory bodies and their respective standards approval and remand processes that will be implicated in any remand of a proposed standard, and (2) specify actual steps to coordinate all of these processing requirements, including those that may be necessary for an expedited deadline to return a remanded proposed reliability standard.

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NERC will:

- Share standards development work plans and schedules with governmental authorities.
- Notify each governmental authority when a reliability standard is 1) proposed for development, 2) drafted for comment, and 3) balloted by stakeholders.
- Provide detailed justification for the approval of each standard submitted.
- Actively seek input and feedback from each governmental authority.

### ***Coordination of Standards Work Plans***

Annually, approximately during the period in which the ERO budget is subject to review and approval by the governmental authorities, NERC will facilitate an informal conference<sup>2</sup> to review standards development work plans with the interested staffs of governmental authorities in the United States, Canada and, as appropriate, Mexico. NERC will host the informal conference and invite representatives from the various governmental authority staffs, as well as stakeholder representatives that are experts with the proposed standards and representatives of the NERC Standards Committee. The conference will be facilitated as a collegial discussion of the objectives, priorities, schedules, and issues with regard to the development of reliability standards.

NERC will maintain a revolving 3-year work plan for standards development, updated annually prior to the informal conference. Additionally, NERC's annual business plan and budget submitted in August of each year will detail the standards development work for the coming year.

NERC will consider the comments and priorities of the 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.

### ***Coordination of Standards Approval Actions***

NERC will file with each governmental authority each reliability standard, modification to a reliability standard, or withdrawal of a standard that is approved by the board. Typically these filings will be made within 30 calendar days of board approval.

Each filing shall be in the format required by the respective 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 the ERO Rules of Procedure; 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.

Where a governmental authority is taking formal action on a reliability standard, the governmental authority is encouraged to use a proceeding that allows dialog with the ERO, other applicable governmental authorities, and, as appropriate, industry experts and stakeholders.

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<sup>2</sup> Webex and conference lines will be available to invitees who are unable to travel to a central location.

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To coordinate the timing of approval actions by governmental authorities, except in situations requiring more timely action, NERC will propose that all reliability standards become effective uniformly across North America on a date that:

- Provides a minimum of a 90-day period for governmental authority review and approval of the standards.
- Provides reasonable time for applicable bulk power system owners, operators, and users to become compliant with the standard.
- Coincides with the start of calendar year or quarter to facilitate implementation of compliance monitoring and reporting.

NERC will maintain an approval-action matrix for each set of proposed reliability standards. The action matrix will indicate the status of approval actions of all applicable governmental authorities. NERC will work with the applicable governmental authorities to obtain the requisite approvals and identify any concerns. NERC will notify all applicable governmental authorities when a status in the approval action matrix changes (e.g., a governmental authority approves the standard). If the approval-action matrix is completed in the planned approval window, the implementation of the standard will be set to begin on the proposed effective date.

If there is a failure to complete the approval-action matrix within the designated approval period, NERC will notify all applicable governmental authorities. NERC will coordinate with the governmental authorities for an effective date for the standard that is practical for the various jurisdictions. If a governmental authority fails to act on the standard for a cause, the remand process will be implemented.

### ***Coordination of Remands and Directives***

During the approval period (minimum of 90 days), if any concern exists that would cause any governmental authority to disapprove a standard or revision to a standard, the governmental authority is requested to inform the ERO in writing of the nature of that concern. The governmental authority should indicate whether it is considering a remand of the proposed standard, has remanded the standard, or is taking another action such as delaying approval, or is simply requesting clarification or additional information.

Upon receiving such a notice, NERC will forward the notice to all applicable governmental authorities within five business days and, where appropriate, request that each relevant governmental authority delay further action until the matter is resolved. Within 30 calendar days of the notice, NERC will propose a work plan and schedule to resolve the issue with the proposed standard. The work plan may be as simple as providing additional clarification to justify approval of the standard, or as extensive as returning the proposed standard to the stakeholder process for further development. The work plan will provide a proposed schedule for completion of the standard and re-submittal for approval.

A similar procedure as described above will be used if a governmental authority directs the development of a particular reliability standard, with or without a fixed time limit. NERC will notify all other governmental authorities of the directive within five business days of receiving the directive and will propose a work plan and schedule to meet the directive within 30 calendar days.

All standards that are remanded for further work or directed by an ERO governmental authority shall be modified or developed using the *Reliability Standards Development Procedure*. NERC will, during the development of a modification for the remanded standard or directed standard, consult and coordinate

with other governmental authorities to ensure that any modifications to the standard would not affect the standard's subsequent approval by the other relevant governmental authorities.

Urgent action or emergency action procedures may be applied if necessary to meet an expedited timetable required by a particular governmental authority. NERC will notify the other relevant governmental authorities on an expedited basis and will coordinate with those governmental authorities as required to ensure that the concerns of all relevant governmental authorities are addressed.

### ***Principal Contacts for Coordination***

NERC shall maintain a current list of government contacts for coordinating actions related to proposed standards. Two contacts will be provided, where available, including one for the filing and issuance of formal actions and a second for less formal coordination of standards development.

Contacts on the list will be notified of the following:

- Notice of the proposal to develop a standard, including the purpose and scope.
- Notice of the draft standard being available for review and comment.
- Notice of the stakeholder balloting of the standard, including the ballot results.

The list is provided in Table 1 below.

**Table 1 — Contacts for the Coordination of Reliability Standards Actions**

	<b>Contact for Filings and Issuing Actions</b>	<b>Coordination Contact</b>
<b>United States</b>	Ms. Magalie R. Salas Secretary <b>Federal Energy Regulatory Commission</b> 888 First Street, N.E. Washington, D.C. 20426	Joseph McClelland Director, Division of Reliability <b>Federal Energy Regulatory Commission</b> 888 First Street, N.E. Washington, D.C. 20426 Phone: (202) 502-8661 e-mail: <a href="mailto:Joseph.McClelland@ferc.gov">Joseph.McClelland@ferc.gov</a>
<b>United States</b>		Kevin Kolevar Director, Office of Electricity Delivery and Energy Reliability <b>U.S. Department of Energy</b>
<b>Canada</b>	Michel L. Mantha Secretary of the Board <b>National Energy Board</b> 444 Seventh Avenue SW Calgary, Alberta T2P 0X8	Bob Modray Technical Specialist, Economics & Energy Analysis <b>National Energy Board</b> 444 Seventh Avenue, S.W. Calgary, Alberta T2P 0X8 Phone: 403 299-3157 Fax: 403 299-3664 e-mail: <a href="mailto:Bmodray@neb-one.gc.ca">Bmodray@neb-one.gc.ca</a>

	<b>Contact for Filings and Issuing Actions</b>	<b>Coordination Contact</b>
<b>Alberta</b>	<p>Deb Young Minister's Secretary <b>Alberta Ministry of Energy</b> 404 Legislature Building 10800 - 97 Avenue Edmonton, Alberta T5K 2B6</p>	<p>Anne Denman Director, Electricity Division <b>Alberta Department of Energy</b> 9945-108 Street 6th Floor, North Petroleum Plaza Edmonton, Alberta T5K 2G6 Phone: 780-422-9212 Fax: 780-427-8065 e-mail: <a href="mailto:Anne.Denman@gov.ab.ca">Anne.Denman@gov.ab.ca</a></p>
<b>British Columbia</b>	<p>Robert J. Pellatt Commission Secretary <b>British Columbia Utilities Commission</b> Box 250, 900 Howe Street Sixth Floor Vancouver, B.C. V6Z 2N3</p>	<p>Lori Ann Boychuk Commissioner <b>British Columbia Utilities Commission</b> Box 250, 900 Howe Street Sixth Floor Vancouver, B.C. V6Z 2N3 Phone: (604) 660-4700 e-mail: <a href="mailto:Lori.Boychuk@bcuc.com">Lori.Boychuk@bcuc.com</a></p>
<b>New Brunswick</b>	<p>Lorraine Légère Board Secretary <b>New Brunswick Board of Commissioners of Public Utilities</b> P.O. Box 5001 15 Market Square, Suite 1400 Saint John, NB E2L 4Y9</p>	
<b>Manitoba</b>	<p>Gary Hastings Assistant Deputy Minister Energy Development Initiative <b>Manitoba Department of Energy, Science and Technology</b> 1200-155 Carlton Street Winnipeg, Manitoba, R3C 3H8</p>	<p>Kurt Simonsen Manager, Utilities and Energy Issues <b>Manitoba Department of Energy, Science and Technology</b> Energy Development Initiative 1200-155 Carlton Street Winnipeg, Manitoba R3C-3H8 Phone: (204) 945-3376 Fax: (204) 943-0031 e-mail: <a href="mailto:ksimonsen@gov.mb.ca">ksimonsen@gov.mb.ca</a></p>
<b>Nova Scotia</b>	<p>Nancy McNeil Regulatory Affairs Officer/Clerk Nova Scotia Utility and Review Board 3rd Floor, Summit Place 1601 Lower Water Street Halifax, Nova Scotia B3J 3P6</p>	<p>Peter Gurnham, Q.C. Nova Scotia Utility and Review Board 3rd Floor, Summit Place 1601 Lower Water Street Box 1692, Unit "M" Halifax, Nova Scotia B3J 3S3 Phone: (902) 424-4448 Fax: (902) 424-3919 e-mail: <a href="mailto:uarb.board@gov.ns.ca">uarb.board@gov.ns.ca</a></p>

	<b>Contact for Filings and Issuing Actions</b>	<b>Coordination Contact</b>
<b>Ontario</b>	Kirsten Walli Board Secretary Ontario Energy Board P.O. Box 2319 2300 Yonge Street Toronto, Ontario M4P 1E4	Rick Jennings Assistant Deputy Minister <b>Ontario Ministry of Energy</b> 3rd floor 880 Bay Street Toronto, Ontario M7A 2C1 Phone: 416 314-6190 Fax: 416 314-6224 e-mail: <a href="mailto:rick.jennings@energy.gov.on.ca">rick.jennings@energy.gov.on.ca</a>
<b>Québec</b>	Veronique Dubois <b>Régie de l'énergie</b> Tour de la Bourse 800, Place Victoria Bureau 255 Montréal, Québec H4Z 1A2	Gilbert Neveu <b>Régie de l'énergie</b> Tour de la Bourse 800, Place Victoria Bureau 255 Montréal, Québec H4Z 1A2
<b>Saskatchewan</b>	James Hoffman <b>Crown Investments Corporation of Saskatchewan</b> 400-2400 College Avenue Regina, Saskatchewan S4P 1C8	John A. McKenzie Manager, Strategic Corporate Development <b>SaskPower</b> 2025 Victoria Avenue, Regina, Saskatchewan S4P-0S1 Phone: 306- 566-3794 e-mail: <a href="mailto:jmckenzie@saskpower.com">jmckenzie@saskpower.com</a>
<b>Mexico</b>		Carlotta Cagigas <b>Comission Reguladora de Energia</b> Mexico Phone: 011-52-555-283-1526 <a href="mailto:ccagigas@cre.gob.mx">ccagigas@cre.gob.mx</a>



# NERC

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

## **Appendix 4A**

# **Audit of Regional Entity Compliance Programs**

**Effective January 18, 2007**

## **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

**Sanction Guidelines  
of the  
North American  
Electric Reliability Corporation**

**Effective January 15, 2008**

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## **1. Preamble and Overview**

The North American Electric Reliability Corporation, as the electric reliability organization (ERO), and regional entities to whom NERC has delegated authority (hereinafter referred to collectively as “regional entities” or individually as a “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 NERC 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 NERC’s penalties, sanctions, and remedial action guidelines.

NERC and the regional entities will exclusively follow the directives, principles and processes in these Sanction Guidelines when determining penalties, sanctions, or remedial action for a violation. However, adjustment factors are also provided to afford NERC or the 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 NERC or the regional entity deems appropriate under the circumstances.

Regional entities shall follow these guidelines to determine penalties, sanctions, or remedial actions. NERC shall oversee the regional entities’ application of the guidelines to ensure that acceptable levels of consistency are achieved. NERC’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 NERC of penalties and sanctions they have determined will be thorough and in sufficient detail that NERC can understand and reasonably replicate the outcomes reached; NERC may develop reporting requirements or a standard reporting form for use by the regional entities for this purpose, as NERC deems necessary or appropriate.

As experience is gained by NERC and the regional entities through the use and application of these guidelines, NERC will review the guidelines and may modify them as NERC deems appropriate or necessary. Authority delegated by NERC to the 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 NERC or the 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 NERC'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. NERC's process and requirements for this are set out in the NERC 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 NERC as meeting the 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 NERC's Rules of Procedure Section 400 and applicable regional entity program documents.

Section 403 paragraph 18 of NERC's Rules of Procedure provides for the possibility of settlements within NERC or regional entity compliance enforcement programs. This document makes reference to settlements to but does not address them further.



### **3. Basic Principles**

The following paragraphs identify and discuss the basic principles underpinning why and how NERC and the 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 NERC Compliance Program**

Primary objectives of NERC as 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, NERC and the regional entities will monitor and act to verify compliance with standards' requirements; however, beyond monitoring and acting only to verify compliance, NERC and the 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 NERC and the 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 NERC or the regional entity upon those responsible for violations shall be a required step within the NERC and regional entity compliance enforcement programs.

#### **3.2 Settlement of Compliance Violations**

NERC and the regional entities shall maintain the reliability of the bulk power system by enforcing compliance with NERC and regional entity reliability standards. NERC and regional entity compliance enforcements programs will lay out how NERC and the 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 NERC Rules of Procedure Section 403.19, violations of the reliability standards may be dealt with through settlements reached between NERC, regional entity and the entity or entities to whom a potential, alleged, or confirmed violation is attributed to by NERC or the 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, NERC or the 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 alleged violations will be reviewed by NERC or the regional entity with the outcome that either the violation will be confirmed or the violation will be dispelled.

The penalty, sanction, or other remedial action for a violation will be determined when an alleged violation is affirmed.

At any time during confirmation review, hearing, or appeals NERC or the regional entity may determine that remedial action is warranted by the subject entity of the review, hearing, or appeals. NERC or the regional entity may direct that such remedial actions be undertaken by the subject entity 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 NERC'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. In the United States, the legislation establishing mandatory enforceable reliability standards and the ERO requires that "Any penalty imposed ... shall; (A) bear a reasonable relation to the seriousness of the violation; and (B) take into consideration the efforts of the user, owner, or operator to remedy the violation in a timely manner<sup>1</sup>.

### **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 NERC and the regional entities will consider while determining the penalty or sanction to be levied.

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<sup>1</sup> H.R.6, Energy Policy Act of 2005, Section 215, Paragraph e, subparagraph 6.

NERC 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. NERC 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 NERC or the 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, NERC or the 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, NERC or the 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.

Some entities may be registered as being responsible for more than one function (e.g., transmission owner, transmission operator, balancing authority, generation operator), and a single requirement in some reliability standards may apply to the responsible entity for several functions. Where several functions are performed by the same entity, a violation will be assessed against the entity, not against each function.

### **3.11 Relation of the Penalty to the Seriousness of the Violation and Violator's Ability to Pay**

As discussed in Section 3.8, above, penalties levied for the violation of a reliability standard shall bear a reasonable relation to the seriousness of the violation. The seriousness of a given violation by a given violator shall be assessed by review of the applicability of the Violation Risk Factors<sup>2</sup> associated with the violation to the characteristics of the violator's operation or power system. Size is a characteristic of a violator's operation or system. The size of the violator can be considered in the assessment but shall not be the only characteristic considered. Where size is considered in such a review the facts relating to the violation in question will be reviewed such that the "actual" size of the violator is properly discerned and appropriately considered; the following are provided as illustrative examples:

- If the violator belongs to a generation and transmission cooperative or joint-action agency, size will be attributed to the particular violator, rather than to that generation and transmission cooperative or joint-action agency.

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<sup>2</sup> See Section 4 Part 4.11 for a discussion of these factors

- If the violator constitutes part of a corporate family the size of the violator will be attributed to that violator alone, in the absence of any facts indicating involvement of the whole corporation or corporate affiliates of the violator.
- If the violator is an entity established solely as a shell to register as subject to one or more Reliability Standards the size of the entity will be disregarded in favor of consideration of the size of parent entity or any affiliates that NERC or the regional entity deems involved and constituting the “actual” size of the violator.

At the request of the violator, NERC or the regional entity may review the penalty in light of the violator’s financial ability to pay the penalty. Financial ability shall include both the financial strength of the entity as well as its structure (e.g., for-profit versus non-profit). Where penalties are reduced or eliminated NERC or the regional entity shall consider non-monetary sanctions or remedial action as alternatives or substitutes to the penalty, pursuant to Sections 3.17, 3.18 and 3.19, below, of this document.

The above actions will: (i) promote that violators are penalized or sanctioned commensurate with the risk or effect that their specific violation of the reliability standards had or is having to the reliability of the bulk power system while also; (ii) mitigating overly burdensome penalties to less consequential or financially-limited entities concurrent with; (iii) promoting that no penalty is inconsequential to the violator to whom it is assessed. This will promote that penalties levied for violations of reliability standards bear a reasonable relation to the seriousness of the violation while also addressing violators’ ability to pay the penalties they are assessed.

### **3.12 Violation 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. Using a time horizon element in the determination of penalties for violations provides for recognition of the “more immediate” nature — and hence higher risk — of the threat of some violations as opposed to the lesser-risk “future threat if not corrected” nature of other violations.

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.

Time horizons inherent in reliability standard requirements are not reflected in their assigned Violation Risk Factors or Violation Severity Levels<sup>3</sup>. Accordingly, the time horizon element of a violation will be considered when determining the Base Penalty Amount<sup>4</sup> for the violation.

The time horizon considered and its impact on the selection of the Base Penalty Amount for the violation will be decided upon by NERC or the regional entity based upon judgment and the facts of the violation. The rationale for the time horizon used and its impact on the setting of the Base Penalty Amount will be documented by NERC or the regional entity and provided within the Notice of Penalty issued for the violation.

### **3.13 Extenuating Circumstances**

In unique extenuating circumstances, such as significant natural disasters, penalties may be significantly reduced or eliminated.

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<sup>3</sup> See Section 4 Part 4.11 for a discussion of these factors.

<sup>4</sup> See Section 4 Part 4.2

### **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 NERC or the 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.

### **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 NERC or a regional entity are not limited to monetary penalties; at the discretion of NERC or the 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 NERC'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 NERC 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 NERC or regional entities will by definition be valued in monetary terms: U.S or Canadian dollars. It will be the preference of NERC 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.

NERC 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 NERC or the 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 NERC or a 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 allows for the imposition of civil penalties of up to \$1,000,000 per day per violation.*** NERC and the regional entities draw their authority to levy penalties from the Federal Power Act; accordingly this figure is and can be understood as the maximum monetary penalty that NERC or regional entities are authorized to levy. However, as this legislation also requires that “[a]ny penalty imposed ... shall; (A) bear a reasonable relation to the seriousness of the violation; and (B) take into consideration the efforts of the user, owner, or operator to remedy the violation in a timely manner<sup>5</sup>” ***entities required to comply with the reliability standards must also understand that NERC and the regional entities will be obligated to assess penalties amounts up to and including the maximum amount for violations where warranted pursuant to these guidelines.***

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. NERC or the 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. NERC or the regional entity will review the maximum penalty allowed by the regulatory authorities with jurisdiction.
- c. NERC or the 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.

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<sup>5</sup> H.R.6, Energy Policy Act of 2005, Section 215, Paragraph e, subparagraph 6.

- d. If the lesser penalty is the maximum penalty allowed by the regulatory authorities, the notice of penalty or similar document issued by NERC or the 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 the 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 NERC 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.

### **3.21 Frequency and Duration of Violations**

Section 316A of the Federal Power Act [16 U.S.C. § 825o-1(b)], as amended by the Energy Policy Act of 2005, provides that “any person who violates any provision of Part II of this title or any provision of any rule or order thereunder shall be subject to a civil penalty of not more than \$1,000,000 for each day that such violation continues.”

FERC Order No. 672 interprets this statement as setting a cap on the monetary penalties that the Commission, NERC and regional entities can impose under FPA section 215. FERC has referred to this statutory provision as imposing a maximum \$1,000,000 “per day, per violation” penalty and has directed that the ERO must ensure that in the U.S. such a penalty amount (\$1,000,000), in such a manner (“per day, per violation”), can be imposed for a violation of the Reliability Standards should the conduct at issue so warrant.

Some Reliability Standards may not support the assessment of penalties on a “per day, per violation” basis, but instead should have penalties calculated based on an alternative penalty frequency or duration. Where NERC or the regional entity deems that a monetary penalty is warranted, or where NERC or the regional entity is monetizing (Section 3.19) the value of a non-monetary sanction, for the violation of such a standard NERC or the regional entity shall determine the penalty or monetized amount consistent with the following:

#### Multiple Instances of Violation on One Day

The nature of some Reliability Standards includes the possibility that an entity could violate the same requirement two or more times on the same day. In this instance NERC or the regional entity is not limited to penalizing the violator a maximum of \$1,000,000 per day. As NERC or the regional entity deems appropriate NERC or the regional entity may deem that there have been multiple violations that occurred on the same day, each of which is subject to the maximum potential penalty of \$1,000,000 per violation, per day. Also, NERC or the regional entity is not constrained to assessing the same penalty amount for each of the multiple violations, irrespective of their proximity in time.

#### Cumulative Over Time

Certain requirements of the Reliability Standards are measured not on the basis of discrete acts, but of cumulative acts over time. Reliability Standards that fall into this category are generally those involving measurements based on averages over a given period. Where a violation of such a standard has occurred the element of averaging performance over a period of time introduces the difficulty to NERC or the regional entity of reasonably identifying (i) what date the violation should be deemed to have occurred and (ii) its duration.

If a Reliability Standard requirement measured by an average over time can only be violated once per applicable period, then there is risk that a disproportionately mild penalty might be levied in a

situation where the violation was serious and the effects on the Bulk-Power System severe. In the future, each Reliability Standard requirement that is based on an average over time will specify the minimum period in which a violation could occur and how to determine when a violation arises, which may be other than once per applicable period<sup>6</sup>. In the interim until relevant Reliability Standards are so modified, any ambiguity on this point will be construed conservatively, meaning that where an entity has not complied with such a standard NERC or the regional entity will generally consider that only one violation occurred per measurement period. However, notwithstanding this general principle of one violation per measurement period, if an average must be measured by a span of time greater than a month, each month of that span shall constitute at a minimum one violation.

#### Periodically Monitored Discrete Violation

Some Reliability Standards may involve discrete events which are only monitored periodically or which are reported by exception. If a requirement of such a standard states that a discrete event constitutes a violation, then (i) a violation arises when that event occurs and (ii) that violation continues until remedied; furthermore, (iii) the violation is deemed to have occurred at the point that the entity entered into noncompliance with the standard regardless of the monitoring period for the activity or its date of discovery or reporting. For example, if a task required by a Reliability Standard requirement has not been done by the required date, it is irrelevant that monitoring for compliance for the requirement occurs only on a yearly or other periodic basis; NERC or the regional entity will deem a violation to have occurred on the first day of noncompliance and each day thereafter until compliance is effectuated. Similarly, if a discrete event occurs and is not remedied on the date of occurrence, then NERC or the regional entity will deem a violation to have occurred on the day of the first instance of the noncompliance and each day, or portion thereof thereafter until compliance is effectuated.

Non-compliance with a standard of this type will subject the violator to the potential maximum monetary penalty of \$1,000,000 per violation per day in violation.

NERC or the regional entity is not constrained to assessing the same penalty amount for each day that the entity was in violation of the Reliability Standard requirement in question.

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<sup>6</sup> Para. 41; FERC Order on Clarification and Rehearing [Docket No. RR06-1-006]



## **4. Determination of Monetary Penalties**

The following describes the steps that NERC or the regional entity will follow to determine the monetary penalty for a violation<sup>7</sup>. The determination of non-monetary sanctions is discussed in Section 5 of this document; Section 6 discusses remedial action.

- Step 1. The Base Penalty Amount for the violation will be set as discussed in Sections 4.1 and 4.2, below.
- Step 2. The Base Penalty Amount set in Step 1 will be reviewed pursuant to Section 4.3, below. This will result in the Adjusted Penalty Amount.
- Step 3. The Adjusted Penalty Amount determined in Step 2 may be reviewed in light of the violator's financial ability to pay the penalty. Also, where applicable NERC or the regional entity will reconfirm that the penalty set will disgorge unjust profits or economic benefits associated with an economic choice to violate<sup>8</sup>. At the conclusion of this review the Final Penalty Amount will be set.

Unless NERC or the regional entity deems alternative frequency or duration is warranted penalties shall be assessed on a per violation per day basis. Where NERC or the regional entity deems that alternative penalty frequency or duration is warranted the Notice of Penalty associated with the violation will clearly identify this and provide the rationale for it. Where NERC or the regional entity deems that alternative penalty frequency or duration is warranted, penalties shall be determined in accordance with section 3.21 of the Sanction Guidelines.

### **4.1 Initial Value Range of the Base Penalty Amount**

NERC or the regional entity will determine an initial value range for the Base Penalty Amount by considering two factors regarding the violation: the Violation Risk Factor (VRF) of the requirement violated and the Violation Severity Level (VSL) assessed for the violation. Using the Base Penalty Amount Table provided in Appendix A NERC or the regional entity will look up the initial value range for the Base Penalty Amount by finding the intersection of the violation's VRF and VSL on the table<sup>9</sup>.

#### **4.1.1 Violation Risk Factor**

Each requirement set out within NERC's reliability standards has been assigned a Violation Risk Factor (VRF) through the NERC reliability standards development process. The factors have been defined and approved through the standards development process and are assigned to requirements to provide clear, concise and comparative association between the violation of a requirement and 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 to each standards requirement: Lower Risk Factor, or; Medium Risk Factor, or; High Risk Factor. Definitions of the factors can be found in appropriate standards development process documentation.

#### **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 is assessed post-

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<sup>7</sup> The text in this section discusses the determination of a single penalty for an individual violation; however, the process laid out is also applicable to determining the individual penalties, or a single aggregate penalty, for multiple violations that are associated with each other as discussed in Section 3 Part 3.1 of this document.

<sup>8</sup> Reference: Section 3 Parts 3.15 and 3.16.

<sup>9</sup> As discussed in Section 3 Part 3.1 of this document where there is more than one violation in play, but the violations are sufficiently associated, NERC or the regional entity may set a single initial value range that is appropriate in light of the individual VRF/VSL combinations of the violations.

violation and is an indicator of how severely the violator actually violated the standard(s) requirement(s) in question.

These guidelines utilize the violation severity levels that have been established<sup>10</sup> by NERC 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 Setting of the Base Penalty Amount**

NERC or the regional entity will set the Base Penalty Amount for the violation. The Base Penalty Amount set for the violation may be set at the highest figure of the initial value range determined pursuant to Section 4.1, above. However, NERC or the regional entity may set the Base Penalty Amount at or below the lowest figure of the initial value range in light of two specific circumstances regarding the violation and the violator, specifically:

- a. The applicability of the Violation Risk Factor of the violation to the specific circumstances<sup>11</sup> of violator.
- b. Whether this is an inconsequential first violation by the violator of the reliability standard(s) in question.

As noted in Section 3.12 NERC or the regional entity will consider the time horizon involved with the violation when setting the Base Penalty Amount for the violation. As also noted in Section 3.12 this consideration will be documented for inclusion in the Notice of Penalty issued for the violation.

The penalty amount resulting from the this review will be the Base Penalty Amount that is used as the basis for further adjustment pursuant to the factors discussed in the next section (4.3) of this document.

##### **4.2.1 Applicability of the Violation Risk Factor**

Violation Risk Factors are assigned to standards' requirements as indicators of the expected risk or harm to the bulk power system posed by the violation of a requirement by a typical or median entity that is required to comply. NERC or the regional entity may consider the specific circumstances of the violator to determine if the violation of the requirement in question actually produced the degree of risk or harm anticipated by the Violation Risk Factor. If that expected risk or harm was not or would not have been produced, NERC or the regional entity may set the Base Penalty Amount to a value it (i) deems appropriate and (ii) is within the initial value range set above pursuant to Section 4.1.

##### **4.2.2 First Violation**

If the actual or foreseen impact of the violation is judged to be inconsequential by NERC or the regional entity and the violation is the first incidence of violation of the requirement in question by the violator, NERC or the regional entity may at its discretion: (i) set the Base Penalty Amount to a value it deems appropriate within the initial value range set above pursuant to Section 4.1, or (ii) excuse the penalty for the violation (i.e. set the Base Penalty Amount to 0\$).

This relief will generally not be afforded to the violator if NERC or the regional entity determines that the violator has a poor compliance record; e.g. the circumstances discussed in Section 4.3.1 have been an aggravating factor in one or more previous penalties assessed to the violator.

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<sup>10</sup> Assignment of these levels will be complete and filed with the Commission by March 1, 2008 in accordance with FERC Order on Compliance Filing dated June 7, 2007 [Docket No. RR06-1-007] .

<sup>11</sup> The circumstances of the violator will include but not be limited to, as appropriate: the violator's aggregate and net load; interconnections characteristics such as voltage class and transfer ratings;

This relief will not be available for consideration in instances where the violator has concealed or attempted to conceal the violation, failed or refused to comply with compliance directives from NERC or the regional entity, or intentionally violated 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.

### **4.3 Application of Adjustment Factors**

Adjustment factors provide the opportunity to NERC or the regional entity to adjust the base penalty to reflect the specific facts and circumstances material to each violation and violator.

These guidelines recognize and require that, as a minimum, NERC or the regional entity consider the following:

- a. Repetitive violations and the violator's compliance history
- b. Failure of the violator to comply with compliance directives
- c. Self-disclosure and voluntary corrective action by the violator
- d. Degree and quality of cooperation by the violator in the violation investigation and in any remedial action directed for the violation
- e. The presence and quality of the violator's compliance program quality
- f. Any attempt by the violator to conceal the violation
- g. Intentional violations
- h. Extenuating circumstances

Two documents issued by United States regulatory agencies will be instructive to NERC and the 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.

NERC or the regional may also consider other additional factors it deems appropriate under the circumstances as long as their use is clearly identified and adequately justified. The effect of using these factors will also be fully and clearly disclosed.

#### **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, particularly within a time frame defined within the standard(s) or deemed appropriate by NERC or the regional entity in the absence of the standard(s) defining the time frame, NERC or the regional entity shall consider some increase to the penalty.

The term "violation reset time period" of a standards requirement may be defined or implied within a given standard to describe the period of time generally required for a violator to continue operations without incidence of further violation(s) of the Reliability Standards, particularly of the initial or a similar standard violated, in order to avoid or minimize consideration of the violator's previous violation history for sanctioning purposes in the event of a subsequent violation(s). NERC and the Regional Entities shall exercise appropriate judgment and discretion in this regard as warranted, particularly where no reset time period is specifically set within the standard violated. Repeat violations within violation reset time periods are aggravating factors in the determination of sanctioning. Accordingly, a violation history of no violations will produce no mitigation of the penalty otherwise determined; a

violation history of infrequent minor violations of lesser risk requirements assessed lower violation severity levels may result in small or no increase; a history of more frequent violations or previous violations of higher risk requirements assessed more severe violation severity levels will generally incur commensurately larger increases.

#### **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 NERC or the regional entity, NERC or the regional entity shall consider some increase to the penalty.

#### **4.3.3 Self-Disclosure and Voluntary Corrective Action**

NERC or the regional entity shall consider whether a violator self-disclosed the violation prior to detection or intervention by NERC or the regional entity, and any action undertaken by the violator to correct the situation. NERC or the 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, NERC or the 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**

NERC or the regional entity shall consider the degree and quality of the violator's cooperation with NERC or the regional entity in the investigation of the violation and any remedial action arising from it. NERC or the 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. NERC or the 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**

NERC or the regional entity shall consider the presence and quality of the violator's compliance program. NERC or the 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, NERC or the regional entity may reduce the violator's penalty consistent with the cited sections of the FERC policy. Consistent with the FERC policy NERC or the 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 NERC or the 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, should incur an even larger increase to the penalty otherwise determined.

#### **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 NERC or the 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. If conduct of this nature has been detected on more than one occasion, NERC or the regional entity should assess an even larger increase to the penalty otherwise determined.

NERC or the 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**

NERC or the regional entity will consider if there are extenuating circumstances regarding the violation that justify reduction or elimination of the penalty otherwise determined.

Consideration of adjusting a penalty for this factor would be inconsistent with NERC or the 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.

### **4.4 Setting of the Final Penalty Amount**

The Adjusted Penalty Amount determined in Step 2 may be reviewed in light of the violator's financial ability to pay the penalty. Also, if the violation was an economic choice, NERC or the regional entity will reconfirm that the penalty set will disgorge any unjust profits or economic benefits. At the conclusion of this review the Final Penalty Amount will be set.

#### **4.4.1 Violator's Financial Ability to Pay<sup>12</sup>**

At the written request of the violator NERC or the regional entity will review the penalty determined in Step 2 in light of relevant, verifiable information that the violator provides regarding their financial ability to pay. At the conclusion of this review NERC or the regional entity may:

1. Reduce the penalty payable to an amount that NERC or the regional entity, as applicable, deems the violator has the financial ability to pay, or;
2. Excuse the penalty amount payable, or;
3. Sustain the penalty amount determined in Step 2.

Where the penalty amount has been reduced or excused, NERC or the regional entity shall consider the assessment of appropriate non-monetary sanction(s) as a substitute or an alternative for the penalty amount that has been excused or by which the penalty has been reduced.

#### **4.4.2 Reconfirmation of Disgorgement of Unjust Profit or Gain**

Notwithstanding the application of any other consideration or factor applicable to the determination of a just and reasonable penalty for the violation, if the violation in question involved an economic choice to violate NERC or the regional entity shall reconfirm that the penalty set meets the requirements set forth in Parts 3.15 and 3.16 of Section 3 of this document.

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<sup>12</sup> NERC anticipates that this will be the primary vehicle for addressing the ability to pay of "not-for-profit" and other similar organizations.

## **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

## 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 an alleged violation of a reliability standard by addressing conditions, practices, or any other relevant action or activity. A remedial action directive will be issued when NERC or the regional entity identifies an alleged violation of a reliability standard that must be corrected to promptly reduce the reliability threat that NERC or the regional entity has identified poses to the reliability of the bulk power system.

NERC or the 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 NERC or the 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 NERC or the 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 Commission has concluded that owners, operators, or users of the bulk power system must comply with remedial action directives issued to them by NERC or a regional entity. Noncompliance with a remedial action directive may result in a substantially increased penalty or sanction.

Remedial action directives issued by NERC or the 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 NERC or the 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 NERC or the regional entity.

### 6.3 No Obligation to Issue

NERC or the regional entity may, but is not obligated, to issue remedial action directives. Lack of being issued a remedial action directive does not relieve a 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 NERC or the regional entities only as they deem warranted, when they deem warranted.

### 6.4 Scope of Application

The scope of remedial action directives issued by NERC or the regional entity will be limited to conditions, practices, or any other relevant actions or activities resulting in noncompliance, or that NERC or the 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 NERC or the 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 Commission has interpreted the Federal Power Act to authorize the NERC or the 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 Commission also concluded it is not necessary for NERC or the regional entity to acquire the Commission's or other regulators' approval prior to issuing remedial action directives. Accordingly, NERC or the 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, NERC or the 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 NERC or the 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	Violation Severity Level							
	Lower		Moderate		High		Severe	
	Range Limits		Range Limits		Range Limits		Range Limits	
	Low	High	Low	High	Low	High	Low	High
Lower	\$1,000	\$3,000	\$2,000	\$7,500	\$3,000	\$15,000	\$5,000	\$25,000
Medium	\$2,000	\$30,000	\$4,000	\$100,000	\$6,000	\$200,000	\$10,000	\$335,000
High	\$4,000	\$125,000	\$8,000	\$300,000	\$12,000	\$625,000	\$20,000	\$1,000,000

NOTE: This table describes the amount of penalty that could be applied for each day that a violation continues, subject to the considerations of Section 3.21 regarding frequency and duration of violations.

**Uniform Compliance Monitoring and  
Enforcement Program  
of the  
North American  
Electric Reliability Corporation**

**April 19, 2007**

# Compliance Monitoring and Enforcement Program

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**ATTACHMENT 1 – PROCESS FOR NON-SUBMITTAL OF REQUESTED DATA**

**ATTACHMENT 2 – COMPLIANCE ENFORCEMENT AUTHORITY HEARING  
PROCESS**

# Compliance Monitoring and Enforcement Program

## COMPLIANCE MONITORING AND ENFORCEMENT PROGRAM

### 1.0 INTRODUCTION

This Compliance Monitoring and Enforcement Program (“Compliance Program”) is the program to be used by the North American Electric Reliability Corporation (“NERC”) and the Regional Entities to monitor, assess, and enforce compliance with Reliability Standards within the United States. This is accomplished through compliance monitoring and rigorous proactive Compliance Audits. Compliance monitoring and enforcement programs also will be implemented in Canada consistent with Canadian laws and agreements.

#### 1.1 Definitions

- 1.1.1** Alleged Violation: A potential violation for which the Compliance Enforcement Authority has completed its accuracy and completeness review and has determined that evidence exists to indicate a Registered Entity has violated a Reliability Standard.
- 1.1.2** Annual Audit Plan: A plan developed annually by the Compliance Enforcement Authority that includes the Reliability Standards and Registered Entities to be audited, the schedule of Compliance Audits, and Compliance Audit Participant requirements for the calendar year.
- 1.1.3** Applicable Governmental Authority: A governmental body other than the U.S. Federal Energy Regulatory Commission (“FERC”) with authority to enforce Reliability Standards against a Registered Entity.
- 1.1.4** Complaint: An allegation that a Registered Entity violated a Reliability Standard.
- 1.1.5** Compliance Audit: A systematic, objective review and examination of records and activities to determine whether a Registered Entity meets the requirements of applicable Reliability Standards.
- 1.1.6** Compliance Audit Participants: Registered Entities scheduled to be audited and the audit team members.
- 1.1.7** Compliance Enforcement Authority: NERC or the Regional Entity in their respective roles of monitoring and enforcing compliance with the NERC Reliability Standards.
- 1.1.8** Compliance Violation Investigation: A comprehensive investigation, which may include an on-site visit with interviews of the appropriate personnel, to determine if a violation of a Reliability Standard has occurred.
- 1.1.9** Confirmed Violation: An Alleged Violation for which an entity has: 1) accepted the finding of the violation by a regional entity or NERC and

## Compliance Monitoring and Enforcement Program

will not seek an appeal, 2) completed the appeals process within NERC, or 3) allowed the time for submitting an appeal to NERC to expire.

- 1.1.10** Contested Violation: An Alleged Violation for which the Registered Entity disputes the violation and/or the penalty and sanction determination.
- 1.1.11** Exception Reporting: Information provided to the Compliance Enforcement Authority by a Registered Entity indicating that exceptions to a Reliability Standard baseline norm have occurred (e.g., a system operating limit has been exceeded). Some Reliability Standards require Exception Reporting.
- 1.1.12** Mitigation Plan: An action plan developed by a Registered Entity to (i) correct a violation of a Reliability Standard and (ii) prevent re-occurrence of the violation. A Mitigation Plan is required whenever a Registered Entity violates a Reliability Standard as determined by any means including Compliance Enforcement Authority decision, Settlement Agreement, or otherwise.
- 1.1.13** NERC Compliance Registry: A compilation of the Regional Compliance Registries from each Regional Entity plus the entities for which NERC serves as the Compliance Enforcement Authority.
- 1.1.14** NERC Compliance Monitoring and Enforcement Program Implementation Plan: The annual NERC Compliance Monitoring and Enforcement Program Implementation Plan that specifies the Reliability Standards that are subject to reporting by Registered Entities to the Compliance Enforcement Authority in order to verify compliance and identifies the appropriate monitoring procedures and reporting schedules for each such Reliability Standard.
- 1.1.15** Periodic Data Submittals: Modeling, studies, analyses, documents, procedures, methodologies, operating data, process information or other information to demonstrate compliance with Reliability Standards and provided by Registered Entities to the Compliance Enforcement Authority on a time frame required by a Reliability Standard or an ad hoc basis.
- 1.1.16** Regional Compliance Registry: A list, pursuant to Section 500 of the NERC Rules of Procedure of the owners, operators or users of the bulk power system or the entities registered as their designees for the purpose of compliance within a Regional Entity's geographic footprint that perform one or more functions in support of reliability of the bulk power system. The Registry is used to determine the Reliability Standards applicable to the Registered Entity.

## Compliance Monitoring and Enforcement Program

- 1.1.17** Regional Implementation Plan: An annual plan, submitted by November 1 of each year to NERC for approval that, in accordance with NERC Rule of Procedure Section 401.6 and the NERC Compliance Monitoring and Enforcement Program Implementation Plan, identifies (1) all Reliability Standards identified by NERC to be actively monitored during each year, (2) other Reliability Standards proposed for active monitoring by the Regional Entity, (3) the methods to be used by the Regional Entity for reporting, monitoring, evaluation, and assessment of performance criteria with each Reliability Standard, and (4) the Regional Entity's Annual Audit Plan.
- 1.1.18** Registered Entity: An owner, operator, or user of the bulk power system or the entities registered as their designees for the purpose of compliance that is included in the NERC and Regional Compliance Registry.
- 1.1.19** Remedial Action Directive: An action (other than a penalty or sanction) required by a Compliance Enforcement Authority that (1) is to bring a Registered Entity into compliance with a Reliability Standard or to avoid a Reliability Standard violation, and (2) is immediately necessary to protect the reliability of the bulk power system from an imminent threat.
- 1.1.20** Required Date: The date given a Registered Entity in a notice from the Compliance Enforcement Authority by which some action by the Registered Entity is required. Such date shall provide the Registered Entity a reasonable period of time in which to take the required action, given the circumstances and the action required.
- 1.1.21** Self-Certification: Attestation by a Registered Entity of compliance or non-compliance with Reliability Standards for which Self-Certification is required by the Compliance Enforcement Authority and that are included for monitoring in the Regional Implementation Plan.
- 1.1.22** Self-Reporting: A report by a Registered Entity of a violation of a Reliability Standard, based on its own assessment, in order to provide prompt reports of any Reliability Standard violation and the actions taken or that are being taken to resolve the violation.
- 1.1.23** Spot Checking: A process in which the Compliance Enforcement Authority requests a Registered Entity to provide information to support the Registered Entity's Self-Certification, Self Report, or Periodic Data Submittal and to assess whether the Registered Entity complies with Reliability Standards. A Spot Check may also be random or initiated in response to events, as described in the Reliability Standards, or by operating problems or system events. A Spot Check may require an on-site review to complete.

## **Compliance Monitoring and Enforcement Program**

### **2.0 IDENTIFICATION OF ORGANIZATIONS RESPONSIBLE FOR COMPLYING WITH RELIABILITY STANDARDS**

The Compliance Enforcement Authority shall register the organizations responsible for complying with Reliability Standards, in accordance with Section 500 of the NERC Rules of Procedure. The Compliance Enforcement Authority shall identify the owners, operators, and users of the bulk power system that meet the definition of Registered Entities within the Compliance Enforcement Authority's area of responsibility. Each Registered Entity shall inform the Compliance Enforcement Authority promptly of changes to its Registration information. The Compliance Enforcement Authority shall inform each Registered Entity at the time of registration of the Reliability Standards that are applicable to the Registered Entity. The Compliance Enforcement Authority shall maintain on its website a current listing of Reliability Standards that are applicable to all Registered Entities.

The Compliance Enforcement Authority will designate a contact person(s) and require each Registered Entity to designate a contact person(s) responsible for sending and receiving all necessary information and communications concerning compliance matters. The Compliance Enforcement Authority will designate where Registered Entities are to send information, data, Mitigation Plans, or any other compliance-related correspondence.

Each Regional Entity shall develop, maintain, and provide to NERC a Regional Compliance Registry with updates whenever changes occur to the registry. NERC shall maintain the NERC Compliance Registry on its Web site. NERC will provide FERC and Applicable Governmental Authorities monthly updates to the NERC Compliance Registry.

### **3.0 COMPLIANCE MONITORING AND ENFORCEMENT PROCESSES**

The Compliance Enforcement Authority will monitor, assess, and enforce compliance with Reliability Standards using eight (8) monitoring processes to collect information in order to make assessments of compliance: (1) Compliance Audits, (2) Self-Certifications, (3) Spot Checking, (4) Compliance Violation Investigations, (5) Self-Reporting, (6) Periodic Data Submittals, (7) Exception Reporting, and (8) Complaints. These processes are described in Sections 3.1 through 3.8 below.

Enforcement actions taken by the Compliance Enforcement Authority through the Compliance Program may include the imposition of remedial actions, sanctions, and penalties, where applicable, which shall be based on the schedule of penalties and sanctions approved for implementation by FERC and other Applicable Governmental Authorities. The imposition and acceptance of sanctions and penalties shall not be considered an acceptable alternative to any Registered Entity's continuing obligation to comply with the Reliability Standards. Registered Entities found in violation of a Reliability Standard will be required to mitigate the violation regardless of any enforcement actions taken.

Prior to any enforcement action or hearing, the Compliance Enforcement Authority may request a fact and circumstances review of an alleged violation.

## **Compliance Monitoring and Enforcement Program**

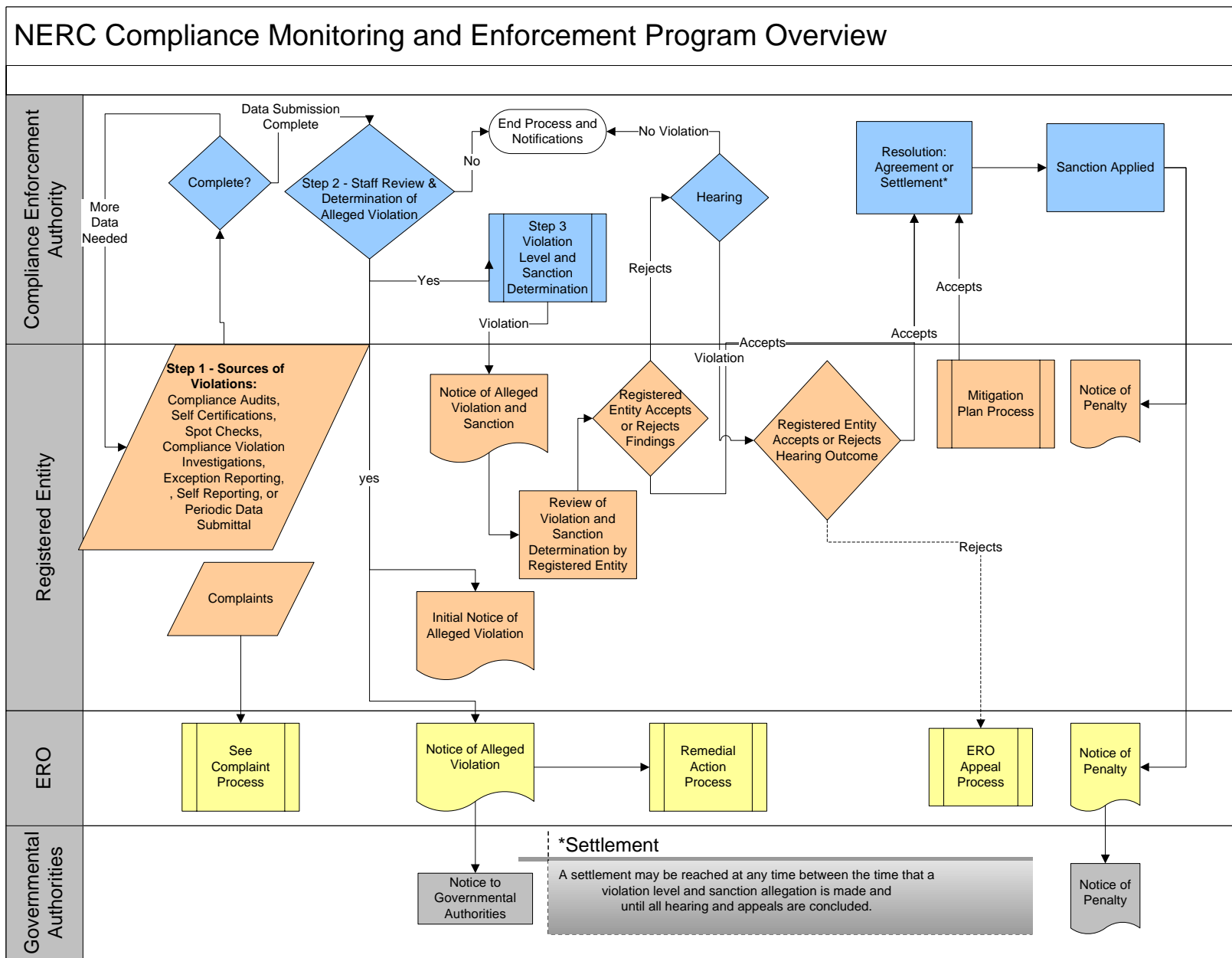
The Compliance Program requires timely data from Registered Entities to effectively monitor compliance with Reliability Standards. If data, information or other reports to determine compliance requested from a Registered Entity are not received by the Required Date, the Compliance Enforcement Authority may execute the steps described in **Attachment 1, Process for Non-submittal of Requested Data**.

Parties engaged in the process described in this section should consult with each other on the data and information that would be appropriate for effectively addressing this section's process requirements. If a party believes that a request for data or information is unreasonable, the party may request a written determination from the NERC compliance program officer.

**Figure 3.0 NERC Compliance Program Process** depicts the overall process steps for the Compliance Program and each of the subsequent process diagrams are either inputs to the overall process or represent an expansion of a single process (e.g., hearing process) shown on this diagram.



# Compliance Monitoring and Enforcement Program



## Compliance Monitoring and Enforcement Program

### 3.1 Compliance Audits

All Registered Entities are subject to audit for compliance with all Reliability Standards applicable to the functions for which the Registered Entity is registered. Compliance Audits are conducted on the Registered Entity's site to the extent required by NERC Rule of Procedure 403.11.2. All Compliance Audits shall be conducted in accordance with audit guides established for the Reliability Standards included in the audit, consistent with accepted auditing guidelines as approved by NERC.

#### 3.1.1 Compliance Audit Process Steps

The process steps for a Compliance Audit are as follows and as shown on **Figure 3.1**:<sup>1</sup>

- The Compliance Enforcement Authority distributes the Annual Audit Plan (developed in coordination with NERC) to the Compliance Audit Participants and NERC. The Compliance Enforcement Authority provides additional information to the Compliance Audit Participants, including audit materials, coordinating agendas and changes to the audit schedule as required. Prior to the audit, the Compliance Enforcement Authority informs the Registered Entity of the Reliability Standards to be evaluated. NERC or the Regional Entity provides the audit schedules to FERC or the Applicable Governmental Authority based upon the agreements in place with the Applicable Governmental Authority.
- At least two (2) months prior to commencement of a regularly scheduled audit, the Compliance Enforcement Authority notifies the Registered Entity of the audit, identifies the audit team members and their recent employment history, and requests data, including a completed NERC pre-audit questionnaire. If the audit team members change from the time of the original notification, the Compliance Enforcement Authority will promptly notify the Registered Entity of the change and will allow time for the Registered Entity to object to the member (see 3.1.5).
- The Registered Entity provides to the Compliance Enforcement Authority the required information in the format specified in the request.
- The audit team reviews the submitted information for conformance with the requirements of the Reliability Standards prior to performing the audit. The audit team follows NERC audit guidelines in the implementation of the audit. This shall include conducting an exit briefing with the Registered Entity, providing for a review of the audit report with the Registered Entity before it is finalized, and issuing an audit report, including an assessment of compliance with the Reliability Standards to the Compliance Enforcement Authority.
- The Compliance Enforcement Authority reviews the report developed by the audit team and completes an assessment of any Alleged Violations with the Reliability Standards identified in the report.

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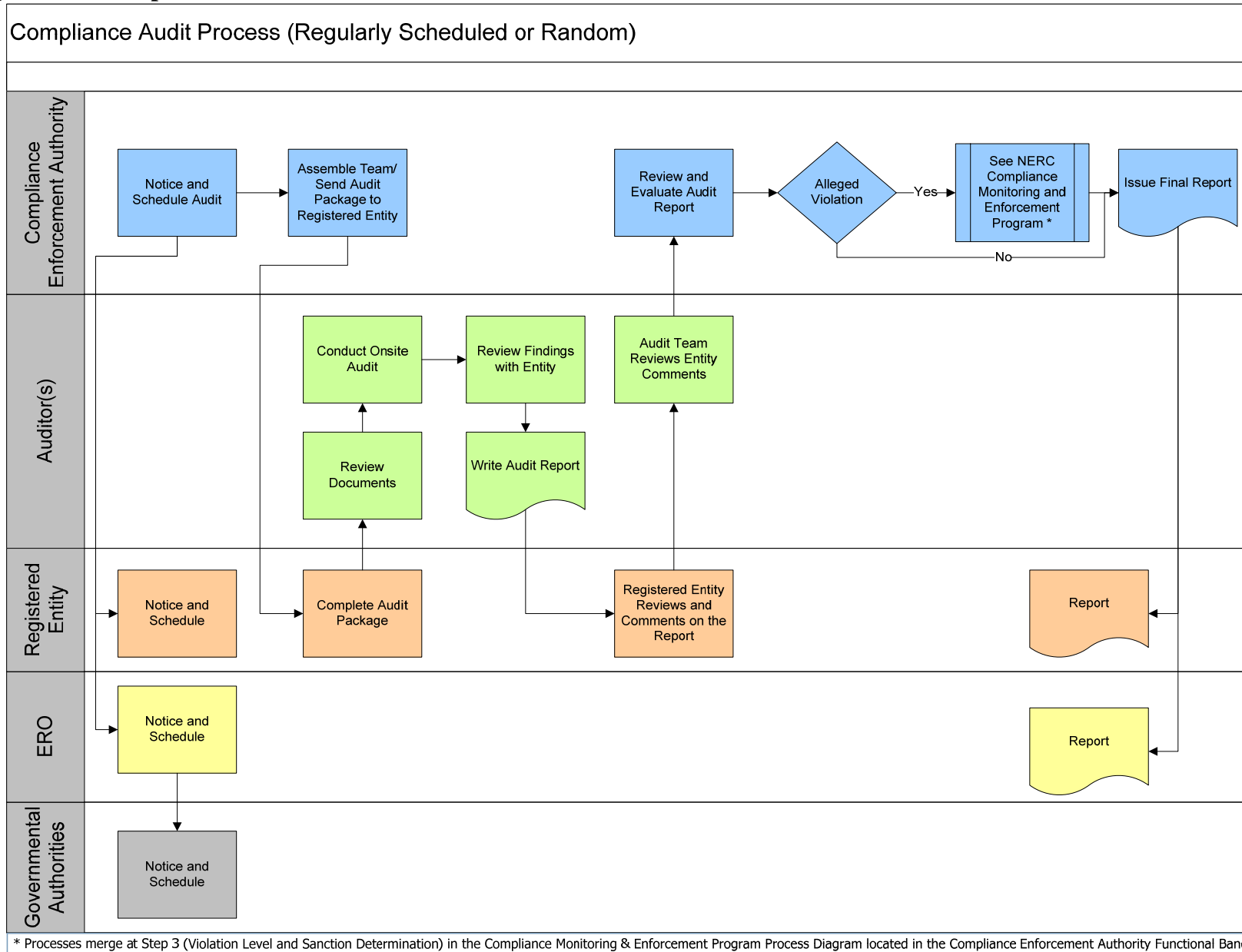
<sup>1</sup>This process normally completes within sixty (60) days of the completion of the compliance audit.

## Compliance Monitoring and Enforcement Program

- The Compliance Enforcement Authority provides the final audit report to the Registered Entity and to NERC.
- If the Compliance Enforcement Authority concludes that a reasonable basis exists for believing a violation has occurred, it shall send the Registered Entity a notice containing the information set forth in Section 5.1 and the process moves to step 3 (Notice of Alleged Violation) of the Compliance Program Process shown in **Figure 3.0**.
- Regional Entities will notify NERC of any Alleged Violations as required by Section 8.0.

# Compliance Monitoring and Enforcement Program

## Figure 3.1 – Compliance Audit Process



## **Compliance Monitoring and Enforcement Program**

### **3.1.2 Compliance Enforcement Authority Annual Audit Plan and Schedule**

The Compliance Enforcement Authority shall develop an Annual Audit Plan. The Annual Audit Plan of Regional Entities will be included in the Regional Implementation Plans submitted to NERC for review and approval (see Section 4.2). NERC or the Regional Entity provides the Annual Audit Plans to FERC or the Applicable Governmental Authority consistent with the agreements in place with the Applicable Governmental Authority.

Prior to January 1 of the year covered by the Annual Audit Plan, the Compliance Enforcement Authority shall notify Registered Entities subject to Compliance Audits during the upcoming year, of the audit schedules, methods, and data requirements for the audit. The Compliance Enforcement Authority will give due consideration to any schedule changes requested by Registered Entities to avoid unnecessary burdens.

Revisions and additions to a Regional Entity Annual Audit Plan shall be approved by NERC and the Registered Entity shall be notified in a timely manner (normally 60 days in advance) of changes or revisions to scheduled audit dates.

### **3.1.3 Frequency of Compliance Audits**

The Compliance Enforcement Authority will perform comprehensive Compliance Audits as required by the NERC Rules of Procedure based on criteria established by NERC. Additionally, an unscheduled Compliance Audit of any Registered Entity may be initiated by the Compliance Enforcement Authority if reasonably determined to be necessary to ensure the Registered Entities' compliance with Reliability Standards.

### **3.1.4 Scope of Compliance Audits**

A Compliance Audit will include all Reliability Standards applicable to the Registered Entity monitored in the NERC Implementation Plans in the current and three previous years, and may include other Reliability Standards applicable to the Registered Entity. If a Reliability Standard does not require retention of data for the full period of the audit, the audit will be applicable to the data retention period specified in the Reliability Standard.

### **3.1.5 Conduct of Compliance Audits**

The audit team shall be comprised of staff personnel from the Compliance Enforcement Authority and may include contractors and industry volunteers as determined by the Compliance Enforcement Authority to be appropriate to comprise a sufficient audit team. The audit team leader shall be a staff member from the Compliance Enforcement Authority and is responsible for the conduct of the audit and preparation of the audit report. At their discretion, NERC Compliance Staff may participate on any Regional Entity compliance audit team either as an observer or as an audit team member as determined by the Regional Entity. Additionally, FERC and other regulatory bodies with regulatory authority for the Registered Entity may participate on the audit team for any audit of a Registered Entity.

## **Compliance Monitoring and Enforcement Program**

Each audit team member must:

- Be free of conflicts of interests. For example, employees or contractors of the Registered Entity being audited shall not be allowed to participate as auditors in the Compliance Audit of the Registered Entity.
- Comply with the NERC Antitrust Compliance Guidelines and shall have either signed appropriate confidentiality agreements or acknowledgments that the confidentiality agreement signed by the Compliance Enforcement Authority is applicable.
- Successfully complete all NERC or NERC-approved Regional Entity auditor training applicable to the compliance audit. As a transitional matter, for audits conducted prior to January 1, 2008, at least a majority of audit team members must have successfully completed such training.

Prior to the audit, copies of executed confidentiality agreements or acknowledgements will be provided to the Registered Entity.

A Registered Entity subject to an audit may object to any member of the audit team on grounds of a conflict of interest or the existence of other circumstances that could interfere with the team member's impartial performance of his or her duties. Such objections must be provided in writing to the Compliance Enforcement Authority no later than fifteen (15) days prior to the start of on-site audit work. The Compliance Enforcement Authority will make a final determination on whether the member will participate in the audit of the Registered Entity. Nothing in this paragraph shall be read to limit the participation of NERC or FERC staff in the audit.

### **3.1.6 Compliance Audit Reports**

The audit team shall develop a draft audit report that shall include a description of the objective, scope, and methodology of the audit; identify any Alleged Violations of Reliability Standards; identify any mitigation or Remedial Action Directives, which have been completed or pending in the year of the audit; identify the nature of any confidential information redacted. A separate document may be prepared that contains recommendations of the audit team. Any recommendations contained in that document will be considered non-binding. The draft report will be provided to the Registered Entity for comment.

The audit team will consider corrections based on comments of the Registered Entity and provide the final audit report to the Compliance Enforcement Authority who will review the report and assess compliance with the Reliability Standards and provide the Registered Entity with a copy of the final report. Regional Entities will provide the final report to NERC, which will in turn provide the report to FERC or the Applicable Governmental Authority. The Registered Entity shall receive the final audit report at least five (5) business days prior to the release of the report to the public. Work papers and other documentation associated with the audit shall be maintained by the Compliance Enforcement Authority in accordance with NERC requirements.

In the event the audit report identifies Alleged Violations, the final audit report, or pertinent part thereof, shall not be released to the public until after such Alleged Violations have been

## Compliance Monitoring and Enforcement Program

addressed and finally determined by the Compliance Enforcement Authority pursuant to the provisions of Section 5.0.

Information deemed by a Compliance Enforcement Authority or the Registered Entity as critical energy infrastructure information or confidential information (as defined in Section 1501 of the NERC Rules of Procedure) shall be redacted from any public reports.

### 3.2 Self-Certification

The Compliance Enforcement Authority may require Registered Entities to self-certify their compliance with Reliability Standards.

If a Self-Certification accurately identifies a violation of a Reliability Standard, an identification of the same violation in a subsequent Compliance Audit or Spot Check, will not subject the Registered Entity to an escalated penalty as a result of the compliance audit process unless the severity of the violation is found to be greater than reported by the Registered Entity in the Self-Certification.

#### 3.2.1 Self-Certification Process Steps

The process steps for the Self-Certification process are as follows and as shown in **Figure 3.2.1**:<sup>2</sup>

- The Compliance Enforcement Authority posts and updates the reporting schedule and informs Registered Entities. The Compliance Enforcement Authority ensures that the appropriate Reliability Standards, compliance procedures, and required submittal forms for the Reliability Standards being evaluated are maintained and available electronically.
- The Compliance Enforcement Authority requests the Registered Entity to make a Self-Certification within the advance notice period specified by the Reliability Standard. If the Reliability Standard does not specify the advance notice period, this request will be issued in a timely manner (normally thirty (30) days advance notice).
- The Registered Entity provides the required information to the Compliance Enforcement Authority.
- The Compliance Enforcement Authority reviews information to determine compliance with the Reliability Standards and may request additional data and/or information if necessary.
- The Compliance Enforcement Authority completes the assessment of the Registered Entity for compliance with the Reliability Standard (and with the Registered Entity's Mitigation Plan, if applicable). If the Compliance Enforcement Authority concludes that a reasonable basis exists for believing a violation has occurred, it shall send the Registered Entity a notice containing the information set forth in Section 5.1 and the process moves to step 3 (Notice of Alleged Violation) of the Compliance Program Process shown in **Figure 3.0**

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<sup>2</sup>If no non-compliances are found, this process normally completes within sixty (60) days of the Compliance Enforcement Authority's receipt of data.

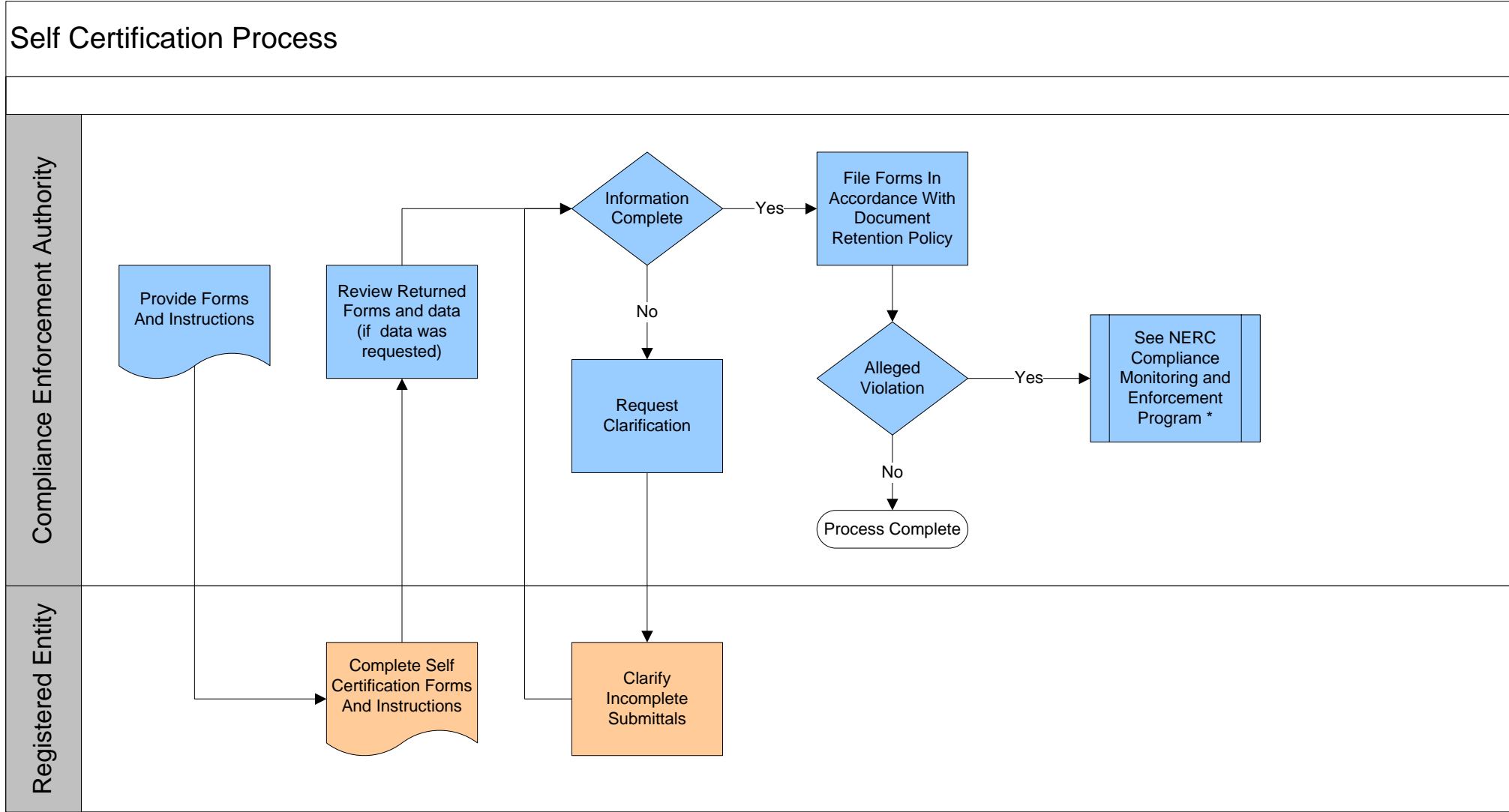
## **Compliance Monitoring and Enforcement Program**

- Regional Entities will notify NERC of any Alleged Violations as required by Section 8.0.



# Compliance Monitoring and Enforcement Program

Figure 3.2.1 – Self Certification Process



\* Processes merge at Step 3 (Violation Level and Sanction Determination) in the Compliance Monitoring & Enforcement Program Process Diagram located in the Compliance Enforcement Authority Function

## Compliance Monitoring and Enforcement Program

### 3.3 Spot Checking

Spot Checking will be conducted by the Compliance Enforcement Authority. Spot Checking may be initiated by the Compliance Enforcement Authority at any time to verify or confirm Self-Certifications, Self Reporting, and Periodic Data Submittals. Spot Checking may also be random or may be initiated in response to events, as described in the Reliability Standards, or by operating problems, or system events. The Compliance Enforcement Authority then reviews the information submitted to verify the Registered Entity's compliance with the Reliability Standard. Compliance auditors may be assigned by the Compliance Enforcement Authority as necessary.

#### 3.3.1 Spot Checking Process Steps

The process steps for Spot Checking are as follows and as shown in **Figure 3.3.1**:<sup>3</sup>

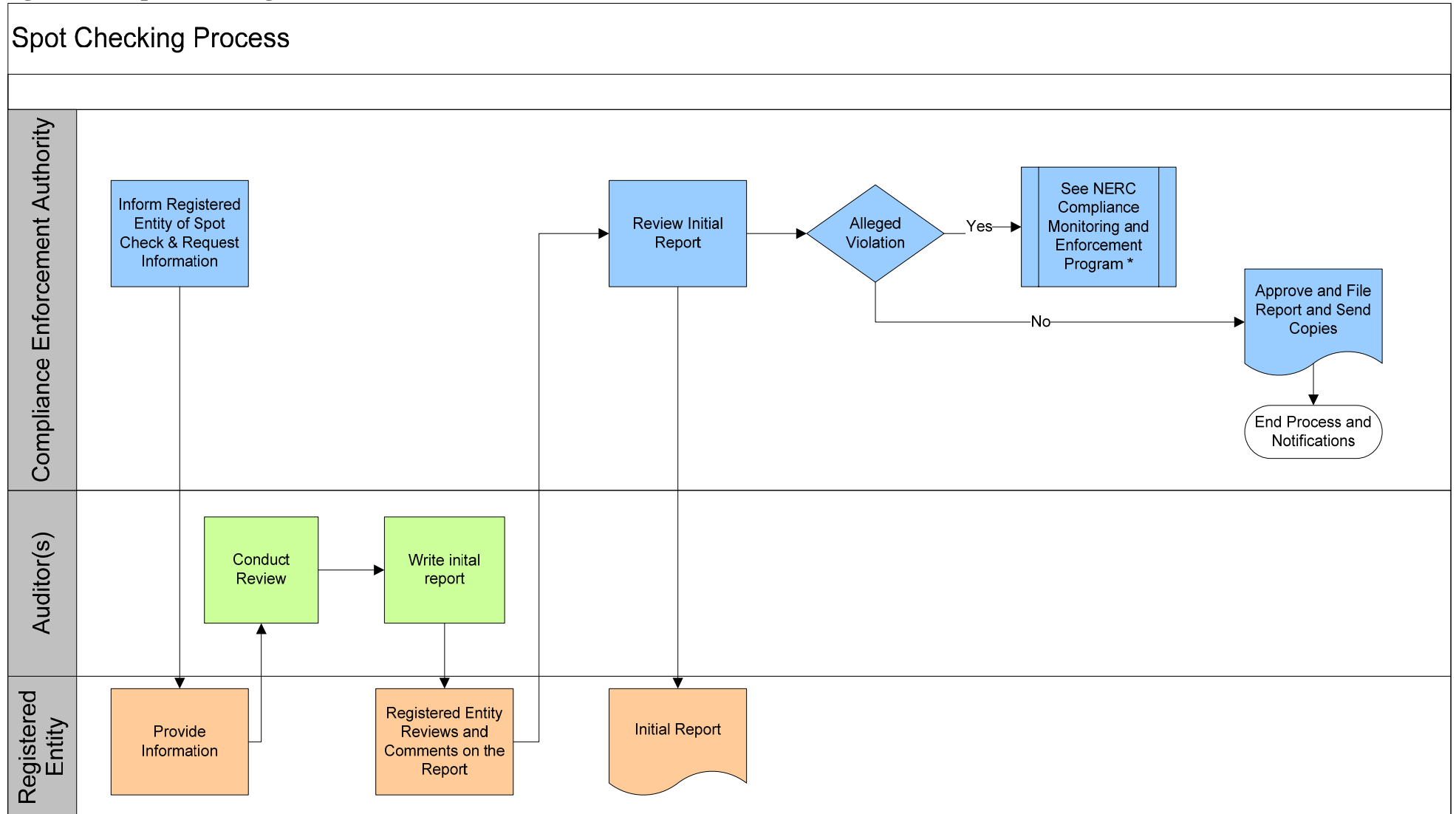
- The Compliance Enforcement Authority notifies the Registered Entity that Spot Checking will be performed and the reason for the spot check within the advance notice period specified by the Reliability Standard. If the Reliability Standard does not specify the advance notice period, any information submittal request made by the Compliance Enforcement Authority will allow at least twenty (20) days for the information to be submitted or available for review.
- The spot check may require submission of data, documentation, or possibly an on-site review.
- The Registered Entity provides required information to the Compliance Enforcement Authority in the format specified in the request.
- The Compliance Enforcement Authority reviews information to determine compliance with the Reliability Standards and may request the additional data and/or information if necessary for a complete assessment of compliance.
- The Compliance Enforcement Authority completes and documents the assessment of the Registered Entity for compliance with the Reliability Standard and provides a report to the Registered Entity indicating the results of the spot check.
- If the Compliance Enforcement Authority concludes that a reasonable basis exists for believing a violation has occurred, it shall send the Registered Entity a notice containing the information set forth in Section 5.1 and the process moves to step 3 (Notice of Alleged Violation) of the Compliance Program Process shown in **Figure 3.0**
- Regional Entities will notify NERC of any Alleged Violations as required by Section 8.0.

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<sup>3</sup>If no alleged violations are found, this process normally completes within ninety (90) days of the Compliance Enforcement Authority's receipt of data.

# Compliance Monitoring and Enforcement Program

Figure 3.3.1 Spot Checking Process



\* Processes merge at Step 3 (Violation Level and Sanction Determination) in the Compliance Monitoring & Enforcement Program Process Diagram located in the Compliance Enforcement Authority Functional Band

## Compliance Monitoring and Enforcement Program

### 3.4 Investigations of Reliability Standard Violations

A Compliance Violation Investigation may be initiated at any time by the Compliance Enforcement Authority in response to a system disturbance, Complaint, or possible violation of a Reliability Standard identified by any other means. Compliance Violation Investigations will generally be led by the Regional Entity's staff. For good cause, NERC reserves the right to assume the leadership of a Compliance Violation Investigation. Compliance Violation Investigations are confidential. Confirmed Violations resulting from a Compliance Violation Investigation will be made public.

#### 3.4.1 Compliance Violation Investigation Process Steps

The process steps for a Compliance Violation Investigation are as follows and as shown in **Figure 3.4.1:**<sup>4</sup>

- The Compliance Enforcement Authority is notified or becomes aware of circumstances indicating a possible violation of a Reliability Standard and determines whether a Compliance Violation Investigation is warranted. The Regional Entity notifies the Registered Entity and NERC within two (2) business days of the decision to initiate a Compliance Violation Investigation and the reasons for the investigation.
- NERC assigns a NERC Staff member to the Compliance Violation Investigation and to serve as a single point of contact for communications with NERC. NERC notifies FERC or other Applicable Governmental Authorities of a Compliance Violation Investigation within two (2) business days after NERC is notified of the decision to initiate a Compliance Violation Investigation.
- The Compliance Enforcement Authority requests data or documentation and provides a list of individuals on the investigation team and their recent employment history. The Registered Entity may object to any individual on the investigation team in accordance with Section 3.1.5. If the Reliability Standard does not specify the advance notice period, a request is normally issued with no less than twenty (20) days advance notice.
- Within ten (10) business days of receiving the notification of a Compliance Violation Investigation, a Registered Entity subject to an investigation may object to any member of the investigation team on grounds of a conflict of interest or the existence of other circumstances that could interfere with the team member's impartial performance of his or her duties. Such objections must be provided in writing to the Compliance Enforcement Authority prior to the start of on-site audit work. The Compliance Enforcement Authority will make a final determination as to whether the individual will participate in the investigation of the Registered Entity.
- If necessary, the Compliance Violation Investigation may include an on-site visit with interviews of the appropriate personnel and review of data.

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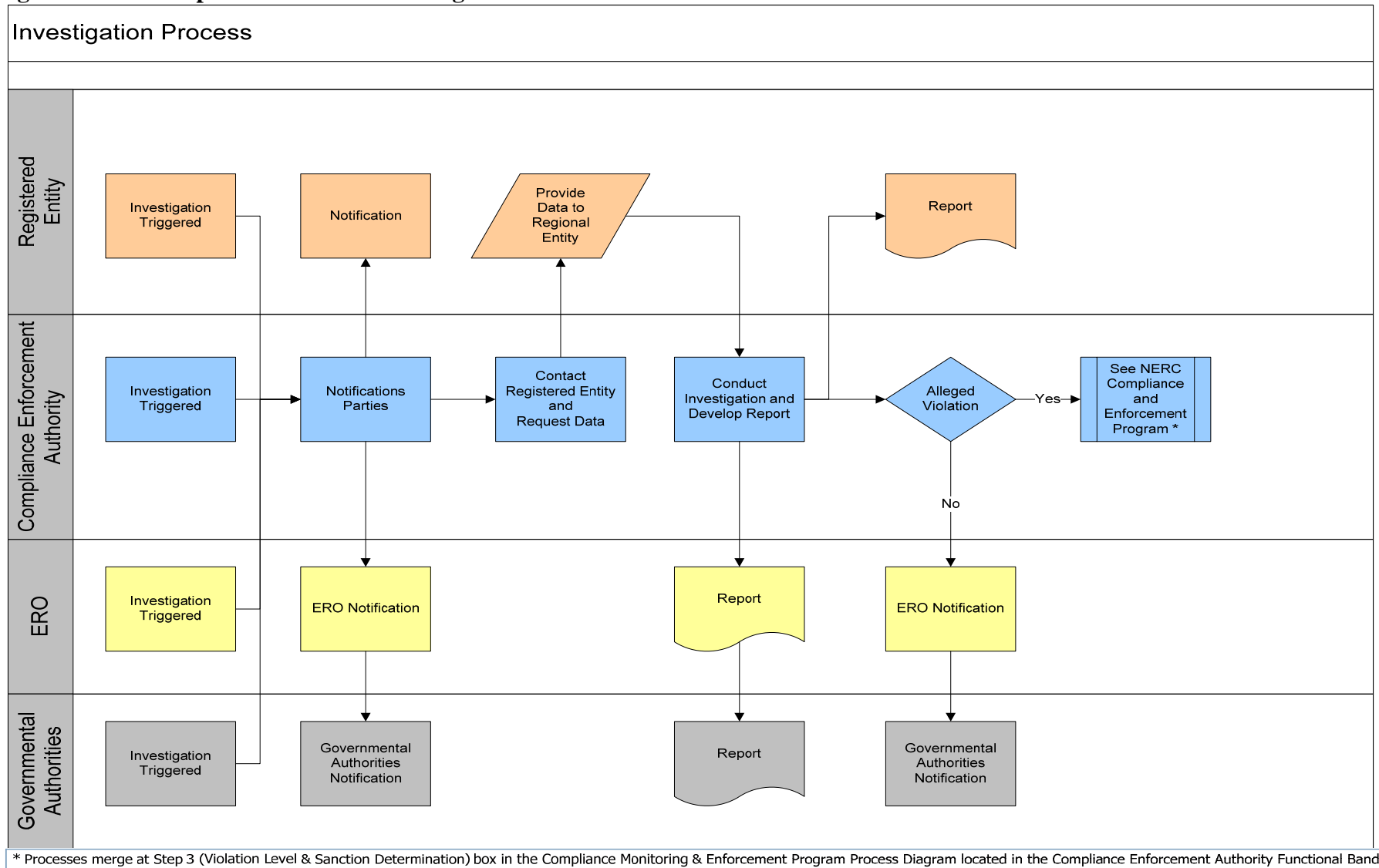
<sup>4</sup>If no alleged violation(s) are found, this process normally completes within sixty (60) days following the decision to initiate a Compliance Violation Investigation.

## Compliance Monitoring and Enforcement Program

- The Registered Entity provides the required information to the Compliance Enforcement Authority in the format as specified in the request.
- The Compliance Enforcement Authority reviews information to determine compliance with the Reliability Standards. The Compliance Enforcement Authority may request additional data and/or information if necessary for a complete assessment or to demonstrate compliance.
- The Compliance Enforcement Authority completes the assessment of compliance with the Reliability Standard and/or approval of the applicable Mitigation Plan, writes and distributes the report, and notifies the Registered Entity.
- If the Compliance Enforcement Authority concludes that a reasonable basis exists for believing a violation has occurred, it shall send the Registered Entity a notice containing the information set forth in Section 5.1 and the process moves to step 3 (Notice of Alleged Violation) of the Compliance Program Process shown in **Figure 3.0**
- Regional Entities will notify NERC of any Alleged Violations as required by Section 8.0.
- If the Compliance Enforcement Authority determines that no violation occurred, it shall send the Registered Entity and NERC a notice that the investigation has been completed. NERC will in turn notify FERC or any other Applicable Governmental Authority.

# Compliance Monitoring and Enforcement Program

Figure 3.4.1 – Compliance Violation Investigation Process



## Compliance Monitoring and Enforcement Program

### 3.5 Self-Reporting

Self-Reporting is encouraged at the time a Registered Entity becomes aware (i) of a violation of a Reliability Standard, or (ii) a change in the Violation Severity Level of a previously reported violation. Self-Reporting of a violation of a Reliability Standard is encouraged regardless of whether the Reliability Standard requires reporting on a pre-defined schedule in the Compliance Program and the violation is determined outside the pre-defined reporting schedule.

#### 3.5.1 Self-Reporting Process Steps

The process steps for Self-Reporting are as follows and as shown in **Figure 3.5.1**:<sup>5</sup>

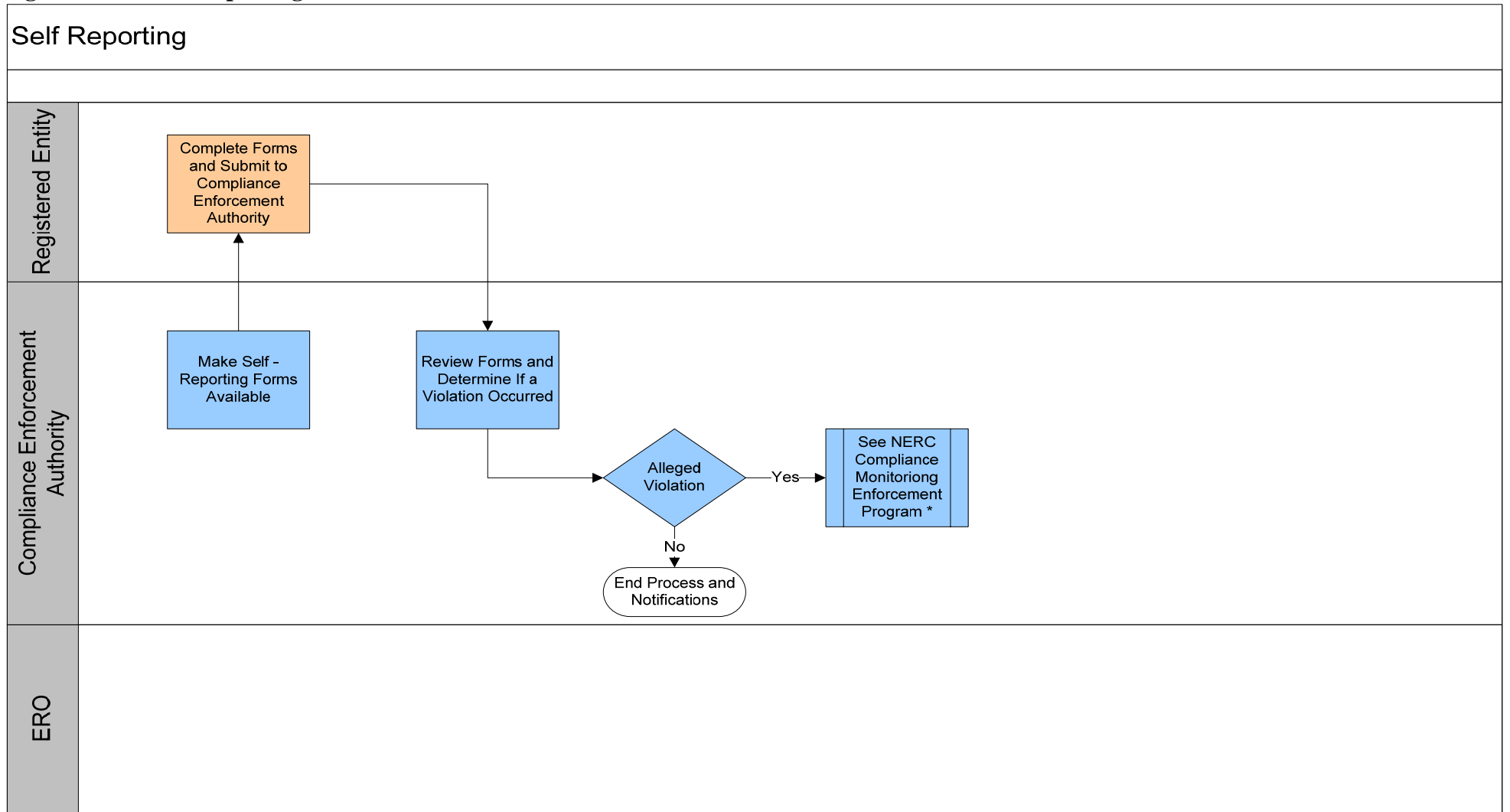
- The Compliance Enforcement Authority posts the Self-Reporting submittal forms and ensures they are maintained and available on its Web site.
- The Registered Entity provides the Self-Reporting information to the Compliance Enforcement Authority.
- The Compliance Enforcement Authority reviews the information to determine compliance with the Reliability Standards and may request the Registered Entity to provide clarification or additional data and/or information.
- The Compliance Enforcement Authority completes the assessment of the Registered Entity for compliance with the Reliability Standards and any Mitigation Plan, if applicable, and notifies the Registered Entity.
- If the Compliance Enforcement Authority concludes that a reasonable basis exists for believing a violation has occurred, the process moves to step 3, Notice of Alleged Violation, of the Compliance Program Process shown in **Figure 3.0**.
- Regional Entities notify NERC of any Alleged Violations as required by Section 8.0.

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<sup>5</sup>This process normally completes within sixty (60) days following the Compliance Enforcement Authority's receipt of data.

# Compliance Monitoring and Enforcement Program

Figure 3.5.1 – Self Reporting Process



\* Processes merge at Step 3 (Violation Level and Sanction Determination) in the Compliance Monitoring & Enforcement Program Process Diagram located in the Compliance Enforcement Authority Functional Band



## Compliance Monitoring and Enforcement Program

### 3.6 Periodic Data Submittals

The Compliance Enforcement Authority requires Periodic Data Submittals in accordance with the schedule stated in the applicable Reliability Standard, established by the Compliance Enforcement Authority, or on an as-needed basis. Requests for data submittals will be issued by the Compliance Enforcement Authority to Registered Entities with at least the minimum advance notice period specified by the applicable Reliability Standard. If the Reliability Standard does not specify an advance notice period, the request will normally be issued with no less than twenty (20) days advance notice.

#### 3.6.1 Periodic Data Submittals Process Steps

The process steps for Periodic Data Submittal are as follows and as shown in **Figure 3.6.1**:<sup>6</sup>

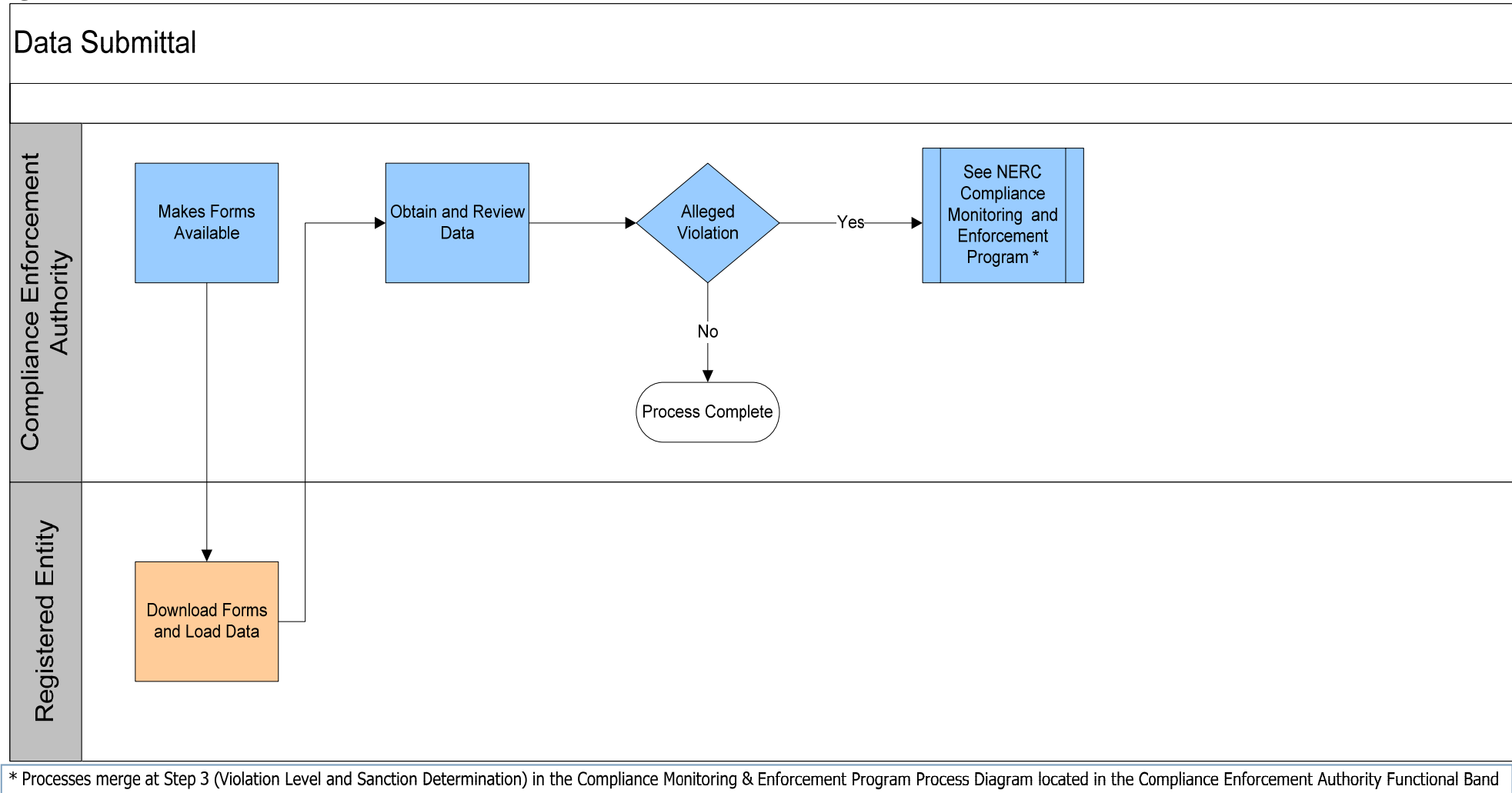
- The Compliance Enforcement Authority posts the current data reporting schedule on its web site and keeps Registered Entities informed of changes and/or updates. The Compliance Enforcement Authority ensures that the appropriate Reliability Standard compliance procedures and the required submittal forms for the Reliability Standards being evaluated are maintained and available via its Web site.
- The Compliance Enforcement Authority makes a request for a Periodic Data Submittal.
- The Registered Entity provides the required information to the Compliance Enforcement Authority in the format as specified in the request.
- The Compliance Enforcement Authority reviews the data submittal to determine compliance with the Reliability Standards and may request additional data and/or information for a complete assessment or to demonstrate compliance.
- The Compliance Enforcement Authority completes the assessment of the Registered Entity for compliance with the Reliability Standard and notifies the Registered Entity.
- If the Compliance Enforcement Authority concludes that a reasonable basis exists for believing a violation has occurred, it shall send the Registered Entity a notice containing the information set forth in Section 5.1 and the process moves to step 3 (Notice of Alleged Violation) of the Compliance Program Process shown in **Figure 3.0**
- Regional Entities notify NERC of any Alleged Violations as required by Section 8.0.

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<sup>6</sup>If no violation(s) are found, this process generally completes within ten (10) business days of the Compliance Enforcement Authority's receipt of data.

# Compliance Monitoring and Enforcement Program

## Figure 3.6.1 – Data Submittal Process



## Compliance Monitoring and Enforcement Program

### 3.7 Exception Reporting

Some Reliability Standards require reporting of exceptions to compliance with the Reliability Standard as a form of compliance monitoring. The Compliance Enforcement Authority shall require Registered Entities to provide reports identifying any exceptions to the extent required by any Reliability Standard.

The Compliance Enforcement Authority shall also require Registered Entities to confirm the number of exceptions that have occurred in a given time period identified by NERC, even if the number of exceptions is zero.

### 3.8 Complaints

Either NERC or Regional Entities may receive Complaints alleging violations of a Reliability Standard. A Regional Entity will conduct a review of each Complaint it receives to determine if the Complaint provides sufficient basis for a Compliance Violation Investigation, except that NERC will review any Complaint (1) that is related to Regional Entities, (2) where the Regional Entity determines it cannot conduct the review, or (3) if the complainant wishes to remain anonymous or specifically requests NERC to conduct the review of the Complaint.

If the Complaint is submitted to NERC, NERC will forward the information to the Regional Entity, as appropriate.

All anonymous Complaints will be reviewed and any resulting Compliance Violation Investigations conducted by NERC will be conducted in accordance with Section 3.8.2 to prevent disclosure of the identity of the complainant.

The Compliance Enforcement Authority conducting the review will determine if the Complaint may be closed as a result of the initial review and assessment of the Complaint to determine if it provides sufficient basis for a Compliance Violation Investigation. The Regional Entity will report the results of its review of the Complaint to NERC. If, as a result of the initial review of the Complaint, the Compliance Enforcement Authority determines that a Compliance Violation Investigation is warranted, a Compliance Violation Investigation will be conducted in accordance with Section 3.4.

#### 3.8.1 Complaint Process Steps

The detailed process steps for the Complaint process are as follows and as shown in **Figure 3.8.1**:<sup>7</sup>

- The complainant notifies NERC or a Regional Entity using the NERC compliance hotline, submitting a NERC complaint reporting form, or by other means. A link to the complaint reporting form will be posted on the NERC and Regional Entity Web sites. The Complaint should include sufficient information to enable NERC or the Regional

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<sup>7</sup>If no violations are found, this process normally completes within sixty (60) days following receipt of the Complaint.

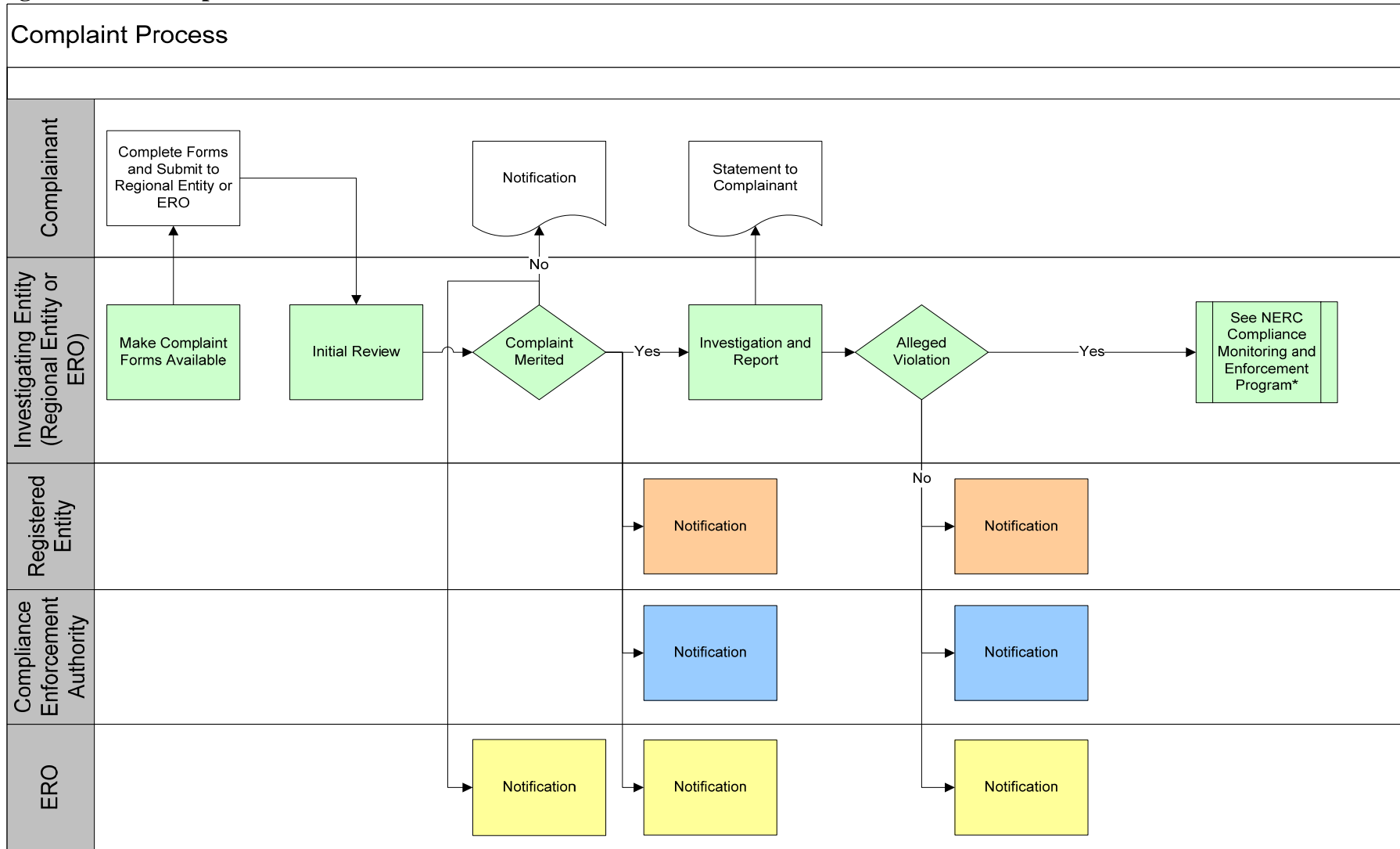
## **Compliance Monitoring and Enforcement Program**

Entity to make an assessment of whether the initiation of a Compliance Violation Investigation is warranted. NERC or the Regional Entity may not act on a Complaint if the Complaint is incomplete and does not include sufficient information.

- If the Compliance Enforcement Authority determines that a Compliance Violation Investigation is warranted, it initiates the Compliance Violation Investigation in accordance with Section 3.4; otherwise it takes no further action. The Compliance Enforcement Authority notifies the complainant, the Registered Entity, and NERC of the Compliance Violation Investigation. If the Compliance Enforcement Authority determines that a Compliance Violation Investigation is not warranted, it will notify the complainant, NERC, and the Registered Entity that no further action will be taken.
- The Compliance Enforcement Authority fully documents the Complaint and the Complaint review, whether a Compliance Violation Investigation is initiated or not.

# Compliance Monitoring and Enforcement Program

Figure 3.8.1 – Complaint Process



+ Anonymous complainant identities will be withheld

\* Processes merge at Step 3 (Violation Level and Sanction Determination) in the Compliance Monitoring & Enforcement Program Process Diagram located in the Compliance Enforcement Authority Functional Band

## **Compliance Monitoring and Enforcement Program**

### **3.8.2 Anonymous Complainant Notification Procedure**

An anonymous complainant who believes, or has information indicating, there has been a violation of a Reliability Standard, can report the Alleged Violation and request that the complainant's identity not be disclosed.<sup>8</sup> All Complaints lodged by a person or entity requesting that the complainant's identity not be disclosed shall be investigated by NERC following the procedural steps described in Section 3.8.1. Anonymous Complaints received by a Regional Entity will either be directed to NERC or the Regional Entity will collect and forward the information to NERC, at the Regional Entity's discretion. Neither NERC nor the Regional Entity shall disclose the identity of any person or entity reporting Alleged Violations to NERC or to a Regional Entity that requests that his/her/its identity not be revealed. The identity of the complainant will only be known by NERC and in the case where a Regional Entity collects the information, by NERC and the Regional Entity. If the Compliance Enforcement Authority determines that a Compliance Violation Investigation is not warranted, it will notify the complainant, NERC, and the Registered Entity that no further action will be taken.

## **4.0 ANNUAL IMPLEMENTATION PLANS**

### **4.1 NERC Compliance Program Implementation Plan**

NERC will maintain and update the NERC Implementation Plan, to be carried out by Compliance Enforcement Authorities in the performance of their responsibilities and duties in implementing the NERC Compliance Monitoring and Enforcement Program. The NERC Implementation Plan will be provided to the Regional Entities by October 1 of each year and will specify the Reliability Standards requiring reporting by Registered Entities to the Compliance Enforcement Authority to provide verification of compliance through one of the monitoring methods described in this Compliance Plan document. The NERC Implementation Plan will be posted on the NERC Web site.

### **4.2 Regional Entity Implementation Plan**

By November 1 of each year, Regional Entities will submit a Regional Implementation Plan for the following calendar year to NERC for approval. The Regional Implementation Plan and the Regional Entity's other relevant Compliance Program documents shall be posted on the Regional Entity's Web site.

## **5.0 ENFORCEMENT ACTIONS**

The Compliance Enforcement Authority shall determine (i) whether there have been violations of Reliability Standards by Registered Entities within the Compliance Enforcement Authority's area of responsibility, and (ii) if so, the appropriate remedial actions, and penalties and sanctions, as prescribed in the NERC Sanction Guidelines (Appendix 4B to the NERC Rules of Procedure). NERC will work to achieve consistency in the application of the Sanction Guidelines by Regional Entities by direct oversight and review of penalties and sanctions, and each Regional

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<sup>8</sup>NERC has established a Compliance Hotline that may be used for the submission of Complaints by persons or entities that do not want his/her/its identity disclosed (see [www.nerc.com](http://www.nerc.com) for additional information).

## **Compliance Monitoring and Enforcement Program**

Entity shall provide to NERC such information as is requested by NERC concerning any penalty, sanction, or remedial actions imposed by the Regional Entity.

Parties engaged in the process described in this section should consult with each other on the data and information that would be appropriate for effectively addressing this section's process requirements. If a party believes that a request for data or information is unreasonable, the party may request a written determination from the NERC compliance program officer.

## Compliance Monitoring and Enforcement Program

### 5.1 Notification to Registered Entity of Alleged Violation

If the Compliance Enforcement Authority alleges that a Registered Entity has violated a Reliability Standard, the Compliance Enforcement Authority shall provide written notice of Alleged Violation and sanction (signed by an officer or designee) to the Registered Entity (CEO or equivalent and compliance contact) and NERC. The Compliance Enforcement Authority may also issue an initial notice of Alleged Violation, without specifying the proposed penalty or sanction, to the Registered Entity. The notice of Alleged Violation and sanction shall contain, at a minimum:

- (i) the Reliability Standard and requirement(s) thereof the Registered Entity has allegedly violated,
- (ii) the date and time the Alleged Violation occurred (or is occurring),
- (iii) the facts the Compliance Enforcement Authority believes demonstrate or constitute the Alleged Violation,
- (iv) the proposed penalty or sanction, if any, determined by the Compliance Enforcement Authority to be applicable to the Alleged Violation in accordance with the NERC Sanction Guidelines, including an explanation of the basis on which the particular penalty or sanction was determined to be applicable,
- (v) notice that the Registered Entity shall, within thirty (30) days, elect one of the following options or the Compliance Enforcement Authority will deem the Registered Entity to have accepted the determination of violation and proposed penalty or sanction:
  - 1. agree with the Alleged Violation and proposed penalty or sanction, and agree to submit and implement a Mitigation Plan to correct the violation and its underlying causes, and may provide a response in accordance with Section 5.2, or
  - 2. agree to the Alleged Violation and agree to submit and implement a Mitigation Plan to eliminate the violation and its underlying causes, but contest the proposed penalty or sanction, and may provide a response in accordance with Section 5.2, or
  - 3. contest both the Alleged Violation and proposed penalty or sanction, and
- (vi) required procedures to submit the Registered Entity's Mitigation Plan.

NERC shall forward a copy of the notice of Alleged Violation to FERC and any Applicable Governmental Authority within two (2) business days of receipt from the Compliance Enforcement Authority.

Upon acceptance of the Alleged Violation and proposed penalty or sanction, the final notice of the violation, penalty, and sanction will then be processed and issued to the Registered Entity.



## **Compliance Monitoring and Enforcement Program**

### **5.2 Registered Entity Response**

If the Registered Entity does not contest or does not respond to the notice of violation within thirty (30) days, it shall be deemed to have accepted the Compliance Enforcement Authority's determination of violation and sanction (if applicable), in which case the Compliance Enforcement Authority shall issue to the Registered Entity and NERC a final report of Confirmed Violation. A Registered Entity may provide a written explanatory statement to accompany the final report.

If the Registered Entity contests the Alleged Violation or the proposed sanction, the Registered Entity shall submit to the Compliance Enforcement Authority a response explaining its position, signed by an officer or equivalent, together with any supporting information and documents. The Compliance Enforcement Authority shall schedule a conference with the Registered Entity within ten (10) business days after receipt of the response. If the Compliance Enforcement Authority and the Registered Entity are unable to resolve all issues within forty (40) days after the Registered Entity's response, the Registered Entity may request a hearing. If no hearing request is made the violation will become a Confirmed Violation when filed by NERC with FERC or the Applicable Governmental Authority.

If a hearing is requested the Compliance Enforcement Authority shall initiate the hearing process by convening a hearing body and issuing a written notice of hearing to the Registered Entity and the hearing body and identifying the Compliance Enforcement Authority's designated hearing representative.<sup>9</sup>

### **5.3 Hearing Process for Compliance Hearings**

The Compliance Enforcement Authority Hearing Process is set forth in **Attachment 2**.

### **5.4 Settlement Process**

Settlement negotiations may occur at any time from the issuance of a notice of Alleged Violation and sanction until a Notice of Penalty is filed with FERC or Applicable Governmental Authority. All settlement negotiations will be confidential until such time as the settlement is approved by NERC. For all settlement discussions, the Compliance Enforcement Authority shall require the Registered Entity to designate an individual(s) authorized to negotiate on its behalf. All settlement agreements must conform to the requirements of NERC Rule of Procedure 403.18 and, if approved, must provide for waiver of the Registered Entity's right to further hearings and appeal.

The Compliance Enforcement Authority will issue a letter setting forth the final settlement terms including all penalties, sanctions and mitigation requirements provided for in the final settlement.

The Regional Entity shall report the terms of all settlements of compliance matters to NERC. NERC will review the settlement for the purpose of evaluating its consistency with other

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<sup>9</sup>If the dispute involves a proposed Mitigation Plan, which has not been accepted by the Compliance Enforcement Authority, the Registered Entity may file a request for hearing with the Compliance Enforcement Authority.

## Compliance Monitoring and Enforcement Program

settlements entered into for similar violations or under other, similar circumstances. Based on this review, NERC will either approve the settlement or reject the settlement and notify the Regional Entity and the Registered Entity of changes to the settlement that would result in approval. If NERC rejects the settlement, the Regional Entity will attempt to negotiate a revised settlement agreement with the Registered Entity including any changes to the settlement specified by NERC. If a settlement cannot be reached, the compliance hearing process shall continue to conclusion.

NERC will (i) report the approved settlement of the violation to FERC or the Applicable Governmental Authority, and (ii) publicly post the violation settled and the resulting penalty or sanction provided for in the settlement. The Compliance Enforcement Authority will issue a letter setting forth the final settlement terms including all penalties, sanctions and mitigation requirements provided for in the final settlement.

### 5.5 NERC Appeal Process

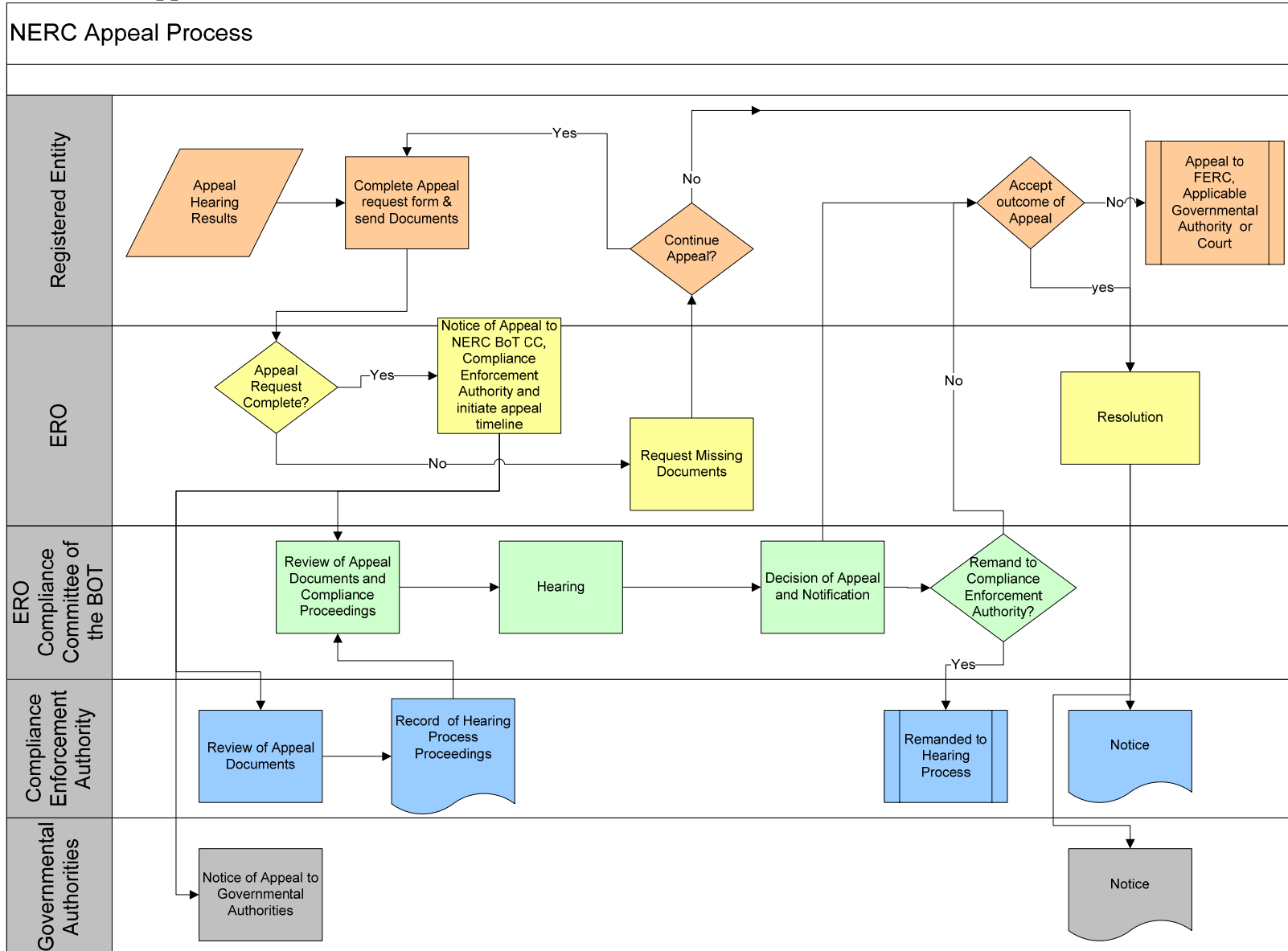
The Registered Entity may appeal the hearing body's decision to NERC, as provided for in NERC Rules of Procedure, Sections 407.3 and 410. The steps for the NERC appeals process are as shown in **Figure 5.5**.<sup>10</sup>

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<sup>10</sup>This process generally completes within ninety (90) days of NERC's receipt of request for appeal.

# Compliance Monitoring and Enforcement Program

Figure 5.5 – NERC Appeal Process



## **Compliance Monitoring and Enforcement Program**

### **5.6 Notice of Penalty**

If the Registered Entity does not dispute the notice of Alleged Violation and the penalty and sanction or a decision has been entered finding a violation and all appeals have been concluded, NERC shall file a Notice of Penalty with FERC or any Applicable Governmental Authority. NERC will include with the Notice of Penalty any statement provided by the Registered Entity as set forth in Section 8.0.

## **6.0 MITIGATION OF VIOLATIONS OF RELIABILITY STANDARDS**

Parties engaged in the process described in this section should consult with each other on the data and information that would be appropriate for effectively addressing this section's process requirements. If a party believes that a request for data or information is unreasonable, the party may request a written determination from the NERC compliance program officer.

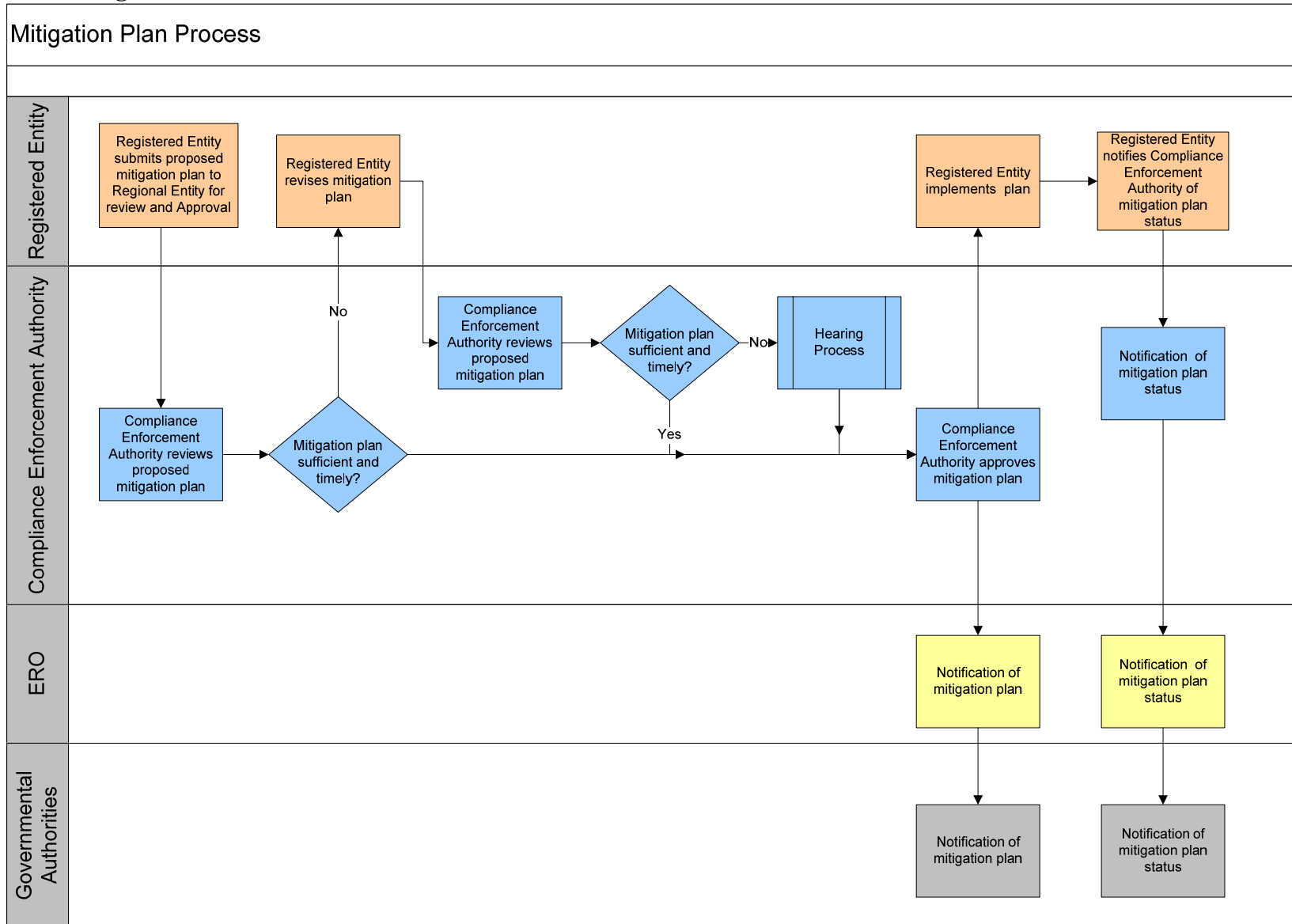
### **6.1 Requirement for Submission of Mitigation Plans**

A Registered Entity found to be in violation of a Reliability Standard shall file with the Compliance Enforcement Authority (i) a proposed Mitigation Plan to correct the violation, or (ii) a description of how the violation has been mitigated, and any requests for extensions of Mitigation Plans or a report of completed mitigation.

**Figure 6.1** shows the process steps for Mitigation Plans.

# Compliance Monitoring and Enforcement Program

Figure 6.1 – Mitigation Plan Process



## **Compliance Monitoring and Enforcement Program**

### **6.2 Contents of Mitigation Plans**

A Mitigation Plan shall include the following information:

- The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section 2.0.
- The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
- The cause of the Alleged or Confirmed Violation(s).
- The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
- The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed Violation(s).
- The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
- A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
- Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined for not completing work associated with accepted milestones.
- Any other information deemed necessary or appropriate

The Mitigation Plan shall be signed by an officer or equivalent of the Registered Entity, which if applicable, shall be the officer that signed the Self-Certification or Self Reporting submittals.

### **6.3 Timetable for Completion of Mitigation Plans**

The Mitigation Plan shall be completed in time to have a reasonable potential to correct all of the violation(s) prior to the next applicable compliance reporting/assessment period after occurrence of the violation for which the Mitigation Plan is submitted. In all cases the Mitigation Plan should be completed without delay. The Compliance Enforcement Authority will expect full compliance with the Reliability Standard to which the Mitigation Plan is applicable at the next report or assessment of the Registered Entity. At the Compliance Enforcement Authority's discretion, the completion deadline may be extended for good cause including: (i) short assessment periods (i.e., event driven or monthly assessments), and (ii) construction

## **Compliance Monitoring and Enforcement Program**

requirements in the Mitigation Plan that extend beyond the next assessment period or other extenuating circumstances. If the Mitigation Plan extends beyond the next applicable reporting/assessment period, sanctions for any violation occurring during the implementation period will be held in abeyance and will be waived if the Mitigation Plan is satisfactorily completed.

Any violations assessed during the period of time the accepted Mitigation Plan is being implemented will be recorded by the Compliance Enforcement Authority with associated sanctions or penalties. Regional Entities will report any findings of violations recorded during this time period to NERC with the notation that the Registered Entity is working under an accepted Mitigation Plan with an extended completion date with penalties and sanctions held in abeyance until completion of the Mitigation Plan. Upon completion of the accepted Mitigation Plan in accordance with Section 6.6, the Compliance Enforcement Authority will notify the Registered Entity that any findings of violations of the applicable Reliability Standard during the period that the accepted Mitigation Plan was being implemented have been waived and no penalties or sanctions will apply. Regional Entities will also notify NERC of any such waivers of violations of Reliability Standards.

A request for an extension of any milestone or the completion date of the accepted Mitigation Plan by a Registered Entity must be received by the Compliance Enforcement Authority at least five (5) business days before the original milestone or completion date. The Compliance Enforcement Authority may accept a request for an extension or modification of a Mitigation Plan if the Compliance Enforcement Authority determines the request is justified, and shall notify NERC of the extension or modification within five (5) business days.

### **6.4 Submission of Mitigation Plans**

A Mitigation Plan may be submitted at any time but shall have been submitted by the Registered Entity within thirty (30) days after being served the notice of Alleged Violation and penalty or sanction, if the Registered Entity does not contest the violation and penalty or sanction. If the Registered Entity disputes the notice of Alleged Violation or penalty or sanction, the Registered Entity shall submit its Mitigation Plan within ten (10) business days following issuance of the written decision of the hearing body, unless the Registered Entity elects to appeal the hearing body's determination to NERC. The Registered Entity may choose to submit a Mitigation Plan while it contests an Alleged Violation or penalty or sanction; such submission shall not be deemed an admission of a violation or the appropriateness of a penalty or sanction. If the Registered Entity has not yet submitted a Mitigation Plan, any subsequent violations of the Reliability Standard identified by the Compliance Enforcement Authority before the hearing body renders its decision will not be held in abeyance and will be considered as repeat violations of the Reliability Standard.

### **6.5 Review and Acceptance or Rejection of Proposed Mitigation Plans**

Unless extended by the Compliance Enforcement Authority, it will complete its review of the Mitigation Plan, and will issue a written statement accepting or rejecting the Mitigation Plan, within thirty (30) days of receipt; otherwise the Mitigation Plan will be deemed accepted. If the Compliance Enforcement Authority rejects a Mitigation Plan, the Compliance Enforcement Authority will provide the Registered Entity with a written statement describing the reasons for

## **Compliance Monitoring and Enforcement Program**

the rejection, and will require the Registered Entity to submit a revised Mitigation Plan by the Required Date. The Compliance Enforcement Authority will notify the Registered Entity within ten (10) business days after receipt of a revised Mitigation Plan whether the Compliance Enforcement Authority will accept or reject the revised Mitigation Plan and provide a written statement describing the reasons for rejection and the Required Date for the second revised Mitigation Plan. If the second review results in rejection of the Mitigation Plan, the Registered Entity may request a hearing in accordance with the Hearing Process, by submitting to the Compliance Enforcement Authority a written request for hearing including an explanation of why the Mitigation Plan should be accepted. After the hearing is completed, the Compliance Enforcement Authority will issue a written statement accepting a Mitigation Plan it deems as appropriate.

Regional Entities will notify NERC within (5) five business days of the acceptance of a Mitigation Plan.

### **6.6 Completion/Confirmation of Implementation of Mitigation Plans**

The Registered Entity shall provide updates at least quarterly to the Compliance Enforcement Authority on the progress of the Mitigation Plan. The Compliance Enforcement Authority will track the Mitigation Plan to completion and may conduct on-site visits and review status during audits to monitor Mitigation Plan implementation.

Upon completion of the Mitigation Plan, the Registered Entity shall provide to the Compliance Enforcement Authority certification, signed by the Registered Entity's officer or equivalent responsible for the plan, that all required actions described in the Mitigation Plan have been completed and shall include data or information sufficient for the Compliance Enforcement Authority to verify completion. The Compliance Enforcement Authority shall request such data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard.

In the event all required actions in the plan are not completed within the applicable deadline including any extensions of the original deadline granted under Section 6.3, any violation(s) of a Reliability Standard subject to the Mitigation Plan that occurred during the originally scheduled time period for completion will be enforced immediately and a new Mitigation Plan must be submitted for acceptance by the Compliance Enforcement Authority. In addition, the Compliance Enforcement Authority may conduct a compliance audit of, or issue a Remedial Action Directive to, the Registered Entity.

Regional Entities will provide to NERC the quarterly status reports and such other information as NERC requests, and will notify NERC when each Mitigation Plan is verified to have been completed.



## **Compliance Monitoring and Enforcement Program**

### **6.7 Recordkeeping**

The Compliance Enforcement Authority will maintain a record containing the following information for each Mitigation Plan:

- Name of Registered Entity.
- The date of the violation.
- Monitoring method by which the violation was detected, i.e., Self-Certification, self-reported, audit, investigation, Complaint, etc.
- Date of notification of violation and sanction.
- Expected and actual completion date of the Mitigation Plan and major milestones.
- Expected and actual completion date for each required action.
- Accepted changes to milestones, completion dates, or scope of Mitigation Plan.
- Registered Entity's completion notice and data submitted as evidence of completion.

### **7.0 REMEDIAL ACTION DIRECTIVES**

The Compliance Enforcement Authority may issue a Remedial Action Directive when such action is immediately necessary to protect the reliability of the bulk power system from an imminent threat. A Remedial Action Directive may include, but is not limited to, any of the following: specifying operating or planning criteria, limits, or limitations; requiring specific system studies; defining operating practices or guidelines; requiring confirmation of data, practices, or procedures through inspection testing or other methods; requiring specific training for personnel; requiring development of specific operating plans; directing a Registered Entity to develop and comply with a plan to remediate a violation; imposing increased auditing or additional training requirements; and requiring a Registered Entity to cease an activity that may constitute a violation of a Reliability Standard.

A Remedial Action Directive may be issued to a Registered Entity at any time, including during any procedures relating to an Alleged Violation of a Reliability Standard. The Compliance Enforcement Authority will specify if a remedial action obviates the need for a Mitigation Plan.

Prior to issuing a Remedial Action Directive, the Regional Entity shall consult the Reliability Coordinator for the Registered Entity, if applicable, to ensure that the remedial action is not in conflict with directives issued by the Reliability Coordinator.

Any Remedial Action Directive shall include a deadline for compliance and will advise the Registered Entity that failure to comply with the directive within the required deadline may result in further Remedial Action Directives or significantly increased sanctions. The Compliance Enforcement Authority will monitor implementation of Remedial Action Directives as necessary to verify compliance.

## **Compliance Monitoring and Enforcement Program**

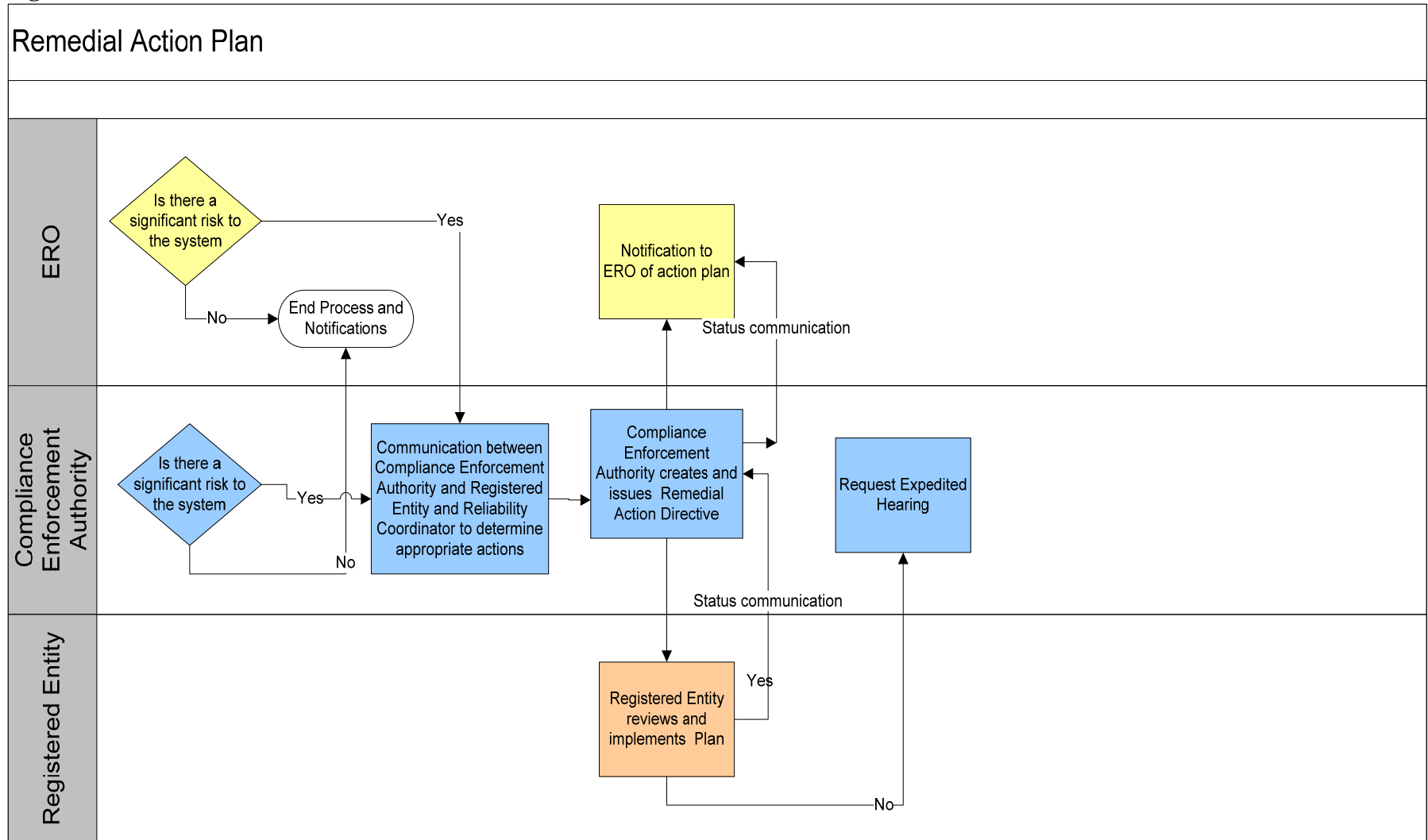
The Regional Entity will notify NERC within two (2) business days after issuing a Remedial Action Directive.

The Registered Entity may contest the Remedial Action Directive by giving written notice to the Compliance Enforcement Authority within two (2) business days following issuance of the directive and may request an expedited hearing. The hearing shall be conducted under the expedited hearing process set forth in Section 10.0 of **Attachment 2, Hearing Process**. The Registered Entity may proceed with implementing the Remedial Action Directive even if it is contesting the Remedial Action Directive.

**Figure 7.0** shows the process steps for a remedial action.

# Compliance Monitoring and Enforcement Program

**Figure 7.0 – Remedial Action Process**



## **Compliance Monitoring and Enforcement Program**

### **8.0 REPORTING AND DISCLOSURE**

Regional Entities shall prepare and submit to NERC all required reports (including those required by NERC Rules of Procedure, Sections 403.14, 403.18 and 403.19, containing current information concerning (1) Registered Entity compliance with Reliability Standards, (2) all Alleged and Confirmed Violations of Reliability Standards by Registered Entities, (3) the status of Alleged Violations, (4) sanctions and penalties, (5) remedial actions imposed, and (6) Mitigation Plan(s) accepted including dates for all required actions and for completion.

Regional Entities shall report to NERC, on a confidential basis, any Alleged Violations of Reliability Standards regardless of significance, whether verified or still under investigation, within five (5) business days, unless the violation has resulted in or has the potential to result in, a reduced level of reliability to the bulk power system (as provided in Section 408 of the NERC Rules of Procedure), in which cases the Regional Entity shall notify NERC within forty-eight (48) hours. NERC shall notify FERC or any Applicable Governmental Authority within two (2) business days of receiving notice from the Regional Entity. Such reports shall include information regarding the nature of the Alleged Violation and its potential impact on the reliability of the bulk power system, the name of the Registered Entity involved, the status and timetable of any compliance violation assessment, and the name of a Regional Entity staff person knowledgeable about the violation or Alleged Violation to serve as a point of contact.

Regional Entities shall report to NERC at least quarterly the status of violations of Reliability Standards, regardless of significance, that have not yet resulted in a final determination of violation or have not completed the Hearing Process, or for which mitigation activities (including activities being carried out pursuant to a settlement) have not been completed. Regional Entities will ensure the information is current when these reports are provided.

Regional Entities shall report to NERC all Confirmed Violations of Reliability Standards by Registered Entities including all penalties, sanctions, Mitigation Plans and schedules, and settlements within ten (10) business days of each determination. At the same time, Regional Entities will provide the report to the affected Registered Entity, accompanied by a notice that the Registered Entity may provide a statement to NERC to accompany the report when posted by NERC. The Registered Entity's statement must be on company letterhead and include the name, title, and signature of an officer of the Registered Entity.

NERC will publicly post each report of a Confirmed Violation, together with any statement submitted by the Registered Entity, no sooner than five (5) business days after the report is provided by the Regional Entity to NERC and the Registered Entity.

NERC will provide reports quarterly to FERC and the Applicable Governmental Authorities on the status of all Alleged and Confirmed Violations for which mitigation activities have not been completed. NERC will publish public reports quarterly on its Web site of all Confirmed Violations of Reliability Standards during the quarter just completed, with the identity of the violator.

## **Compliance Monitoring and Enforcement Program**

### **9.0 DATA RETENTION AND CONFIDENTIALITY**

#### **9.1 Records Management**

The Compliance Enforcement Authority records management policy shall provide for a routine and orderly process for the retention and disposal of electronic and paper records related to the Compliance Program, ensure verification of compliance with appropriate business, regulatory, and legal requirements and at a minimum conform to the Reliability Standards data retention requirements of the Reliability Standards. The policy shall allow for the maintenance of records as required to implement the Compliance Program.

#### **9.2 Retention Requirements**

The Compliance Enforcement Authority records management policy will require that information and data generated or received pursuant to Compliance Program activities, including a Hearing Process, will be retained for a minimum of five (5) years unless a different retention period is specified in a Reliability Standard or by an Applicable Governmental Authority. If the information or data is material to the resolution of a controversy, the retention period for such data shall not commence until after the controversy is resolved.

Upon request from NERC, Regional Entities will provide to NERC copies of such information and data. NERC will retain the information and data in order to maintain a record of activity under the Compliance Program. In providing the information and data to NERC, the Regional Entity shall preserve any mark of confidentiality.

#### **9.3 Confidentiality and Critical Energy Infrastructure Information**

##### **9.3.1 Definitions**

Information or data generated or received pursuant to Compliance Program activities, including a Hearing Process, shall be treated in a confidential manner pursuant to the provisions of Section 1500 of the NERC Rules of Procedure. The terms “confidential information,” “confidential business and market information,” “Critical Energy Infrastructure Information,” and “Critical Infrastructure” shall have the meanings stated in Section 1501 of the NERC Rules of Procedure.

##### **9.3.2 Protection of Confidential Information**

The Compliance Enforcement Authority personnel (including any contractors, consultants and industry volunteers) and committee members, and participants in Compliance Program activities shall be informed of, and agree to comply with, Section 1500 of the NERC Rules of Procedure concerning Confidential Information.

##### **9.3.3 Critical Energy Infrastructure Information**

The Compliance Enforcement Authority will keep confidential all Critical Energy Infrastructure Information in accordance with Section 1500 of the NERC Rules of Procedures. Information deemed to be Critical Energy Infrastructure Information shall be redacted and shall not be released publicly.

## Compliance Monitoring and Enforcement Program

### ATTACHMENT 1

#### PROCESS FOR NON-SUBMITTAL OF REQUESTED DATA

If data, information, or other reports (including Mitigation Plans) requested from a Registered Entity are not received by the Required Date, the Compliance Enforcement Authority may sequentially execute the following steps for each Reliability Standard for which the Compliance Enforcement Authority has requested data, information, or other reports. The Compliance Enforcement Authority however will afford the Registered Entity reasonable opportunity to resolve a difficulty submitting data due to time or format issues.

Step 1: The Compliance Enforcement Authority will issue a follow-up notification to the Registered Entity's designated contact.

Step 2: The Compliance Enforcement Authority will issue a follow-up notification to the Registered Entity's Vice President or equivalent responsible for compliance (with a copy to NERC and the Registered Entity's designated contact).

Step 3: The Compliance Enforcement Authority will issue a follow-up notification to the Registered Entity's Chief Executive Officer or equivalent (with a copy to NERC, the Registered Entity's Vice President or equivalent responsible for compliance and the Registered Entity's designated contact).

A full compliance audit may be scheduled at this step.

Step 4: Thirty (30) days after the Required Date, a Reliability Standard violation may be applied at the Severe Compliance Severity Level.

Step 4 does not apply to Compliance Audits and mitigation tracking requests.

## **Compliance Monitoring and Enforcement Program**

### **ATTACHMENT 2**

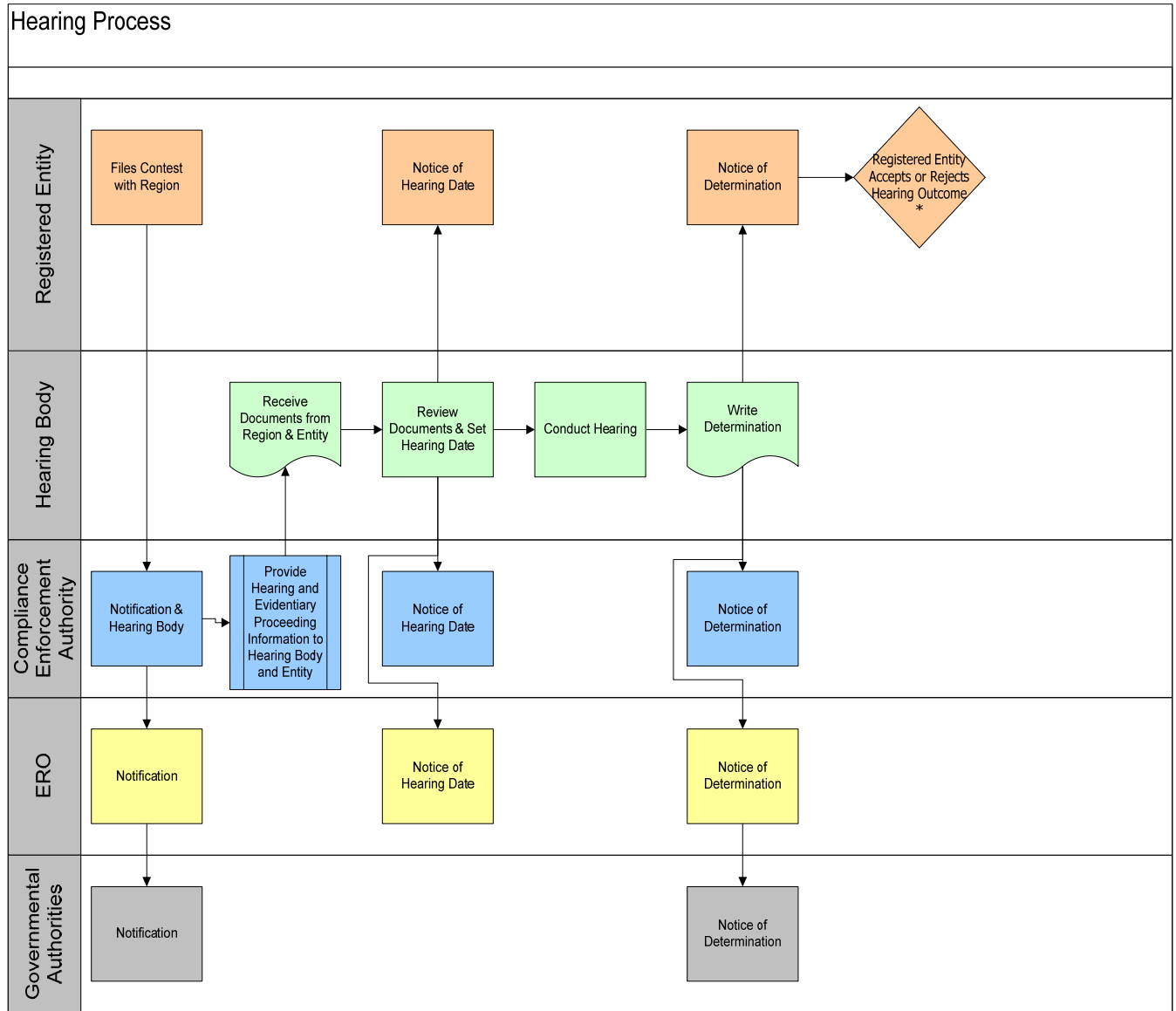
#### **COMPLIANCE ENFORCEMENT AUTHORITY HEARING PROCESS**

This **Attachment 2** sets forth the procedures to be followed to conduct compliance hearings. In this **Attachment 2**, the Compliance Enforcement Authority and the Registered Entity are sometimes referred to as the “parties.” Subject to the authority of the hearing body to alter or extend any time periods or deadlines specified in this **Attachment 2** and to hold such numbers of conferences and hearings as are necessary, it shall be the objective of the hearing process to complete the steps specified herein for formal compliance hearings within ninety (90) days following the issuance of written notice that the hearing body is convened.

**Figure ATT-2** shows the hearing process steps.

# Compliance Monitoring and Enforcement Program

Figure ATT-2 –Hearing Process



\*This merges with the Compliance Monitoring & Enforcement Program flow diagram at the Registered Entity Accepts or Rejects Hearing Outcome decision box



## **Compliance Monitoring and Enforcement Program**

### **1.0 Designation of Hearing Body**

All formal compliance hearings shall be held before the Compliance Enforcement Authority's hearing body. A hearing body shall consist of (i) the Compliance Enforcement Authority's board or committee thereof, or (ii) a balanced compliance panel, reporting directly to the Compliance Enforcement Authority's board, whose membership is composed or selected in accordance with procedures established by the Compliance Enforcement Authority. The Compliance Enforcement Authority shall initiate the hearing process in accordance with Section 5.2 of the Compliance Program by issuing a written notice to the Registered Entity and the members of the hearing body convening the hearing body for a formal compliance hearing on the matter in dispute.<sup>1</sup> The written notice shall state the name of the Compliance Enforcement Authority's designated representative for purposes of the formal compliance hearing.

Following the convening of the hearing body, no representative of a party shall communicate in writing (including by e-mail) to any member of the hearing body regarding the matter to be heard without simultaneously providing a copy of the written communication to the other party, and no representative of a party shall communicate orally with any member of the hearing body regarding the matter to be heard without a representative of the other party being present in person or by telephone. Nothing prevents the hearing body from communicating with a person who has not previously been involved in the matter that is the subject of the hearing and is designated to act as a technical advisor to the hearing body for the hearing. Should any written or oral communications occur in violation of this paragraph, the member(s) of the hearing body receiving or participating in such communication shall promptly issue a written notice to a designated officer of the Compliance Enforcement Authority and to the Registered Entity, setting forth the date, time and place of the communication, the party representative involved in the communication, and a summary of the nature of the communication, and, if the communication was in writing (including by e-mail), shall attach a copy of the written communication.

The hearing body may rule on all procedural and discovery matters. By agreement of the parties and with the approval of the hearing body, any documents may be submitted or exchanged via e-mail.

The hearing body may provide for additional procedures as it deems necessary to effectively carry out a compliance hearing.

### **2.0 Recusal of Member of Hearing Body**

A hearing body member shall decline appointment to a hearing body or recuse himself or herself after appointment if participation on the hearing body would violate the Compliance Enforcement Authority's Conflict of Interest or Code of Conduct policy.

The Registered Entity may raise an objection to any member of the hearing body on grounds of a conflict of interest or the existence of other circumstances that could interfere with the member's impartial performance of his or her duties. Such objections must be provided in writing to the

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<sup>1</sup>If the dispute involves a proposed Mitigation Plan which has not been accepted by the Compliance Enforcement Authority, the Registered Entity may initiate the hearing process by filing a request for hearing with the Compliance Enforcement Authority.

## **Compliance Monitoring and Enforcement Program**

hearing body member reasonably in advance of the start of the hearing and the member shall make a decision on the objection promptly. Upon request of the Registered Entity, the hearing body (without participation of the hearing body member) may review the member's determination and, if so, shall issue a decision on the objection promptly.

### **3.0 Authorized Representatives**

Both the Compliance Enforcement Authority and the Registered Entity shall submit to the hearing body the names of the persons authorized to represent them in the Hearing Process. Such persons shall be officers or equivalents of the Regional Entity and the Registered Entity that have the authority to act on behalf of the Regional Entity and the Registered Entity, respectively. In addition, a party shall advise the hearing body and the other party if the party will be represented by legal counsel.

### **4.0 Statement of Alleged Violation and Response by Registered Entity**

The Compliance Enforcement Authority shall initiate the hearing process in accordance with Section 5.2 of the Compliance Program by issuing a written notice to the Registered Entity and the members of the hearing body convening the hearing body for a compliance hearing on the matter in dispute. If the dispute involves a proposed Mitigation Plan that has not been accepted by the Compliance Enforcement Authority, the Registered Entity may initiate the hearing process by filing a request for hearing with the Compliance Enforcement Authority.

Within five (5) business days after the date the hearing body is convened, the Compliance Enforcement Authority's designated representative shall file with the hearing body (with copies to the Registered Entity) a copy of the written notice of the Alleged Violation and sanction that was originally provided to the Registered Entity, along with copies of any documents gathered and reviewed by the Compliance Enforcement Authority in the course of determining an Alleged Violation has occurred and in determining the proposed sanction or penalty. Within twenty (20) days after the date the hearing body is convened, the Registered Entity shall file with the hearing body (with copies to the Compliance Enforcement Authority's designated representative) a written statement of reasons why the Alleged Violation is in error and/or a written statement of reasons why the proposed penalty or sanction is inappropriate (if applicable in the particular case), along with copies of all documents relied on by the Registered Entity to support its position.

If the hearing involves a Mitigation Plan, within twenty (20) days after the hearing body is convened, the Compliance Enforcement Authority shall file a report stating why the Registered Entity's proposed Mitigation Plan was not accepted.<sup>2</sup>

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<sup>2</sup>If the hearing involves a Mitigation Plan, at this point in the process the Registered Entity shall file its proposed Mitigation Plan and supporting information stating why the Mitigation Plan should be accepted.

## **Compliance Monitoring and Enforcement Program**

### **5.0 Setting of Hearings and Conferences**

The hearing body shall set a date for an initial conference within thirty (30) days after the date the hearing body is convened. At the initial conference, the hearing body shall establish specific procedures for the hearing including (i) any procedures for exchange of additional documents, (ii) any written testimony, (iii) the hearing date(s), and (iv) dates for any briefs. Subject to Sections 6.1 and 6.2 of this hearing process, each party shall be entitled to (i) present the testimony of witnesses, (ii) make an oral presentation of position, and (iii) file a written post-hearing brief.

The hearing body may hold additional conferences. All notices of conferences and hearings shall set forth the date, time and place of hearing. The hearing body shall issue a written memorandum setting forth the agreements and rulings made at each conference.

By agreement of the hearing body and the parties, any conference or hearing may be conducted via teleconference, except that, subject to section 6.0 of this hearing process, witnesses shall personally appear at the hearing.

All conferences and hearings shall not be open to the public.

### **6.0 Conduct of Hearing**

The hearing will be conducted under the provisions of this section 6.0 or under shortened procedures specified in section 6.1. Unless the Registered Entity or the Compliance Enforcement Authority requests a hearing under section 6.0 no later than ten (10) business days after the Registered Entity files its response to the Compliance Enforcement Authority pursuant to section 4.0, the hearing will be conducted under the shortened procedures specified in section 6.1.

The hearing need not be held on consecutive days, and shall be held at the executive offices of the Compliance Enforcement Authority unless the hearing body decides on a different location after consulting with the parties.

The party requesting transcription of the hearing, the Registered Entity or Compliance Enforcement Authority, will arrange and pay for transcription of the hearing.

The hearing body shall direct either (1) that the direct testimony of any witnesses be in written form, supported by affidavit, or (2) that a list of the names and addresses of the witnesses each party intends to present and a brief statement of the expected testimony of each witness be served on the other party and the hearing body no less than ten (10) business days prior to the first day of the hearing in which the witness will be testifying. All witnesses shall be required to appear in person, unless waived by the parties and the hearing body. Copies of exhibits shall be served on the other party and the hearing body at least ten (10) business days prior to the date of the hearing in which the exhibit is introduced.

The hearing body shall determine the order of presentation of evidence. All witnesses shall testify under oath or affirmation administered by a court reporter or notary public.

The hearing body may exclude evidence that is immaterial or unduly repetitious or prejudicial. Evidence not otherwise admissible under generally-recognized rules of evidence may be

## **Compliance Monitoring and Enforcement Program**

admitted if it is of a type commonly relied on by reasonably prudent persons in the conduct of their affairs. Any written or documentary evidence excluded by the hearing body shall be retained, and any proposed oral testimony may be documented by an offer of proof.

At the request of a party or the hearing body, each party may make an opening and closing statement.

### **6.1 Shortened Procedure**

Unless the Registered Entity or Compliance Enforcement Authority requests otherwise, hearings shall be conducted pursuant to a shortened procedure, in which (1) the requirements that testimony be under oath and transcribed shall not apply, (2) the prohibition against ex parte communications shall not apply, and (3) the hearing body may consider evidence that would otherwise be excludable.

### **6.2 Disposition without Evidentiary Hearing**

If it appears to the hearing body, based on a review of the Notice of Alleged Violation and Response, that there are no genuine issues of material fact, it may request the parties to identify in writing any such issues. Unless the parties' responses, supported by sworn affidavits, demonstrate that there are genuine issues of material fact, the hearing body may proceed without any evidentiary hearing and render its decision based on the written filings and any oral presentation.

### **7.0 Submission of Post-Hearing Briefs**

The parties may submit post-hearing briefs on a schedule established by the hearing body. The parties may, and on request of the hearing body shall, submit proposed findings of fact and conclusions of law.

### **8.0 Record of the Compliance Hearing**

If applicable, copies of the following documents shall be maintained by the hearing body as the record of the hearing process:

- The written notice that the hearing body has been convened.
- The notice of Alleged Violation and sanction issued by the Compliance Enforcement Authority and the response filed by the Registered Entity, including in each case all attachments thereto and documents provided therewith.
- If the hearing involves a Mitigation Plan, (i) the Registered Entity's proposed Mitigation Plan and supporting information as to why the mitigation plan should be accepted and (ii) the report of the Compliance Enforcement Authority stating why the Mitigation Plan was not accepted.
- Any requests for recusal of a member of the hearing body and any responses to such requests.
- All motions, notices and responses filed by the parties during the hearing process.

## **Compliance Monitoring and Enforcement Program**

- All documents that set forth or that summarize any ex parte communications.
- All notices and rulings issued by the hearing body during the hearing process.
- The report issued by the hearing body following each conference.
- All written testimony and all exhibits received into evidence.
- All written testimony and documentary exhibits that were proffered but not admitted into evidence.
- Any transcript(s) and minutes.
- The parties' post-hearing briefs.
- The written decision of the hearing body.

### **9.0 Written Decision by the Hearing Body**

The hearing body shall issue its written decision normally within thirty (30) days following the submission of post-hearing briefs, or, if waived, following the conclusion of the hearing. The written decision shall state the conclusion of the hearing body with respect to Alleged Violations of Reliability Standards and proposed penalties or sanctions at issue in the hearing. If the hearing involves a Mitigation Plan, the written decision shall either accept or reject the Registered Entity's proposed Mitigation Plan. If the proposed Mitigation Plan is rejected, the hearing body may specify the provisions of the Mitigation Plan that the Registered Entity should be required to implement. The written decision shall explain the reasons for the hearing body's conclusions and cite the testimony and exhibits relied on by the hearing body in reaching its conclusions. Copies of the written decision shall be served electronically and by certified mail on the Registered Entity and on the Compliance Enforcement Authority's designated representative.

### **10.0 Expedited Hearing Process for Disputes Concerning Remedial Action Directives**

A Registered Entity that disputes a Remedial Action Directive issued by a Compliance Enforcement Authority may request an expedited hearing. To facilitate the expedited hearing, the Compliance Enforcement Authority may establish a hearing body for purposes of the expedited hearing process consisting of three or more members of the Compliance Enforcement Authority's governing board or other designated hearing body. The following expedited procedures shall be followed:

- The Registered Entity shall provide its request for hearing to the Compliance Enforcement Authority's designated representative in writing within two (2) business days after receipt of the Remedial Action Directive.
- The hearing body shall be convened within two (2) business days after receipt of the Registered Entity's request for a hearing.

## Compliance Monitoring and Enforcement Program

- The hearing body shall conduct a hearing on the matter, in person or by teleconference, within seven (7) business days after the hearing body is convened. At the hearing, the Compliance Enforcement Authority shall explain why the Remedial Action Directive should be complied with, and the Registered Entity shall explain why the Remedial Action Directive is not necessary or should be modified.
- The hearing body shall issue a summary written decision within ten (10) business days following the hearing, stating whether the Registered Entity shall or shall not be required to comply with the Remedial Action Directive and identifying any modifications to the directive that it finds appropriate.
- If the hearing body's summary written decision concludes that the Registered Entity is required to comply with the Remedial Action Directive or any modification to such directive (including adjustments to the timetable for implementation), the Registered Entity shall be required to begin implementing the Remedial Action Directive upon receipt of the summary written decision, if it has not already implemented the Remedial Action Directive.
- Within thirty (30) days following issuance of its summary written decision, the hearing body shall issue a full written decision conforming to the requirements of Section 9.0 of this **Attachment 2**.

# NERC

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

## **Appendix 5**

# **Organization Registration and Certification Manual**

**Version 3.3**

**Effective January 18, 2007**

**Attachment 10 to  
Non-Governance Compliance Filing**

**Appendix 5 to Rules of Procedure**

**Organization Registration and Certification Manual**



# Organization Registration and Certification Manual

Version 3.3

North American Electric Reliability Corporation

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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:

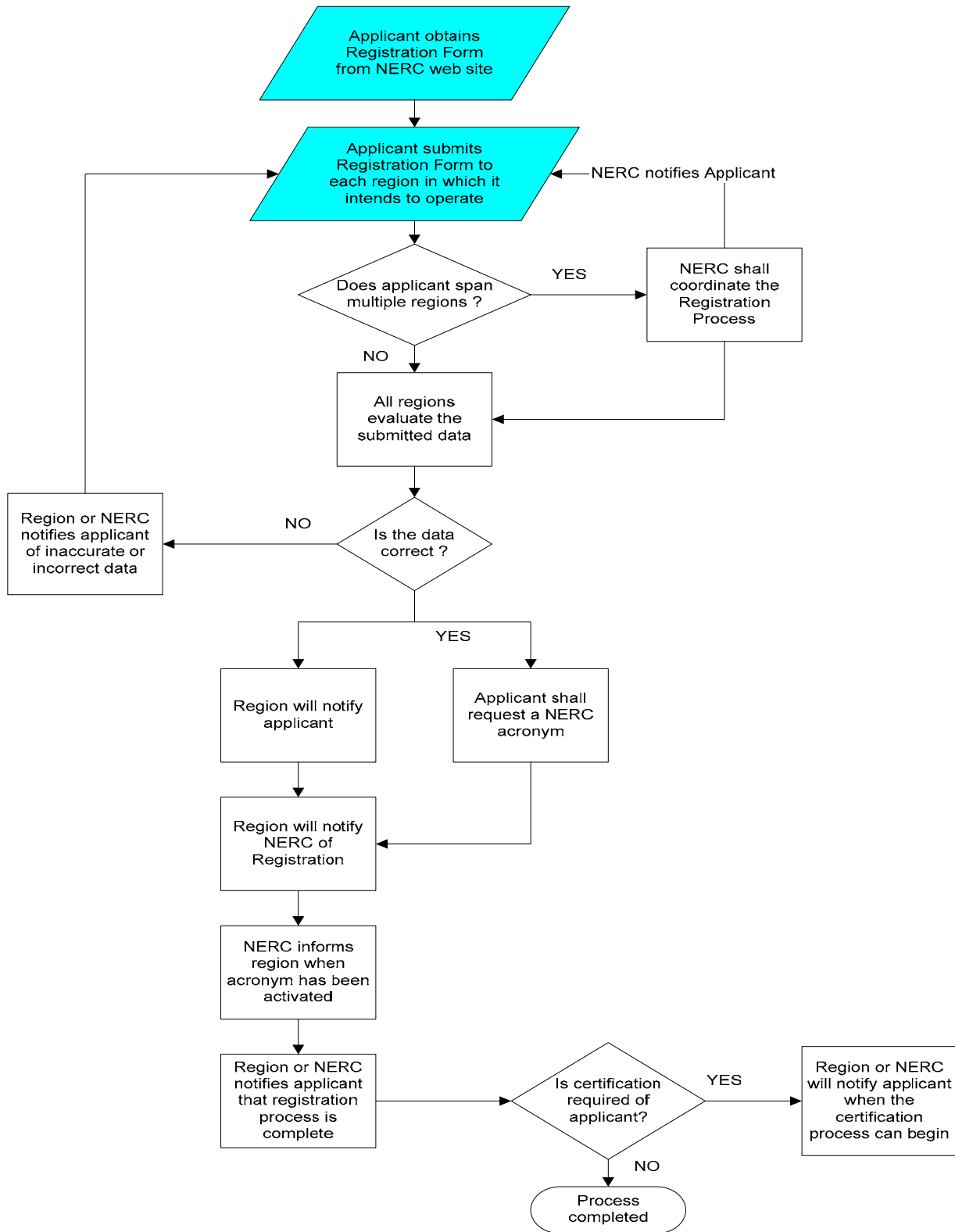
1. Become certified as those functional model entities will be able to do so either all at the same time or one at a time as long as they become certified in all applicable functions prior to January 1, 2009.
2. Become certified in only one or two of the three can do so at any time but must continue 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.

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## 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**

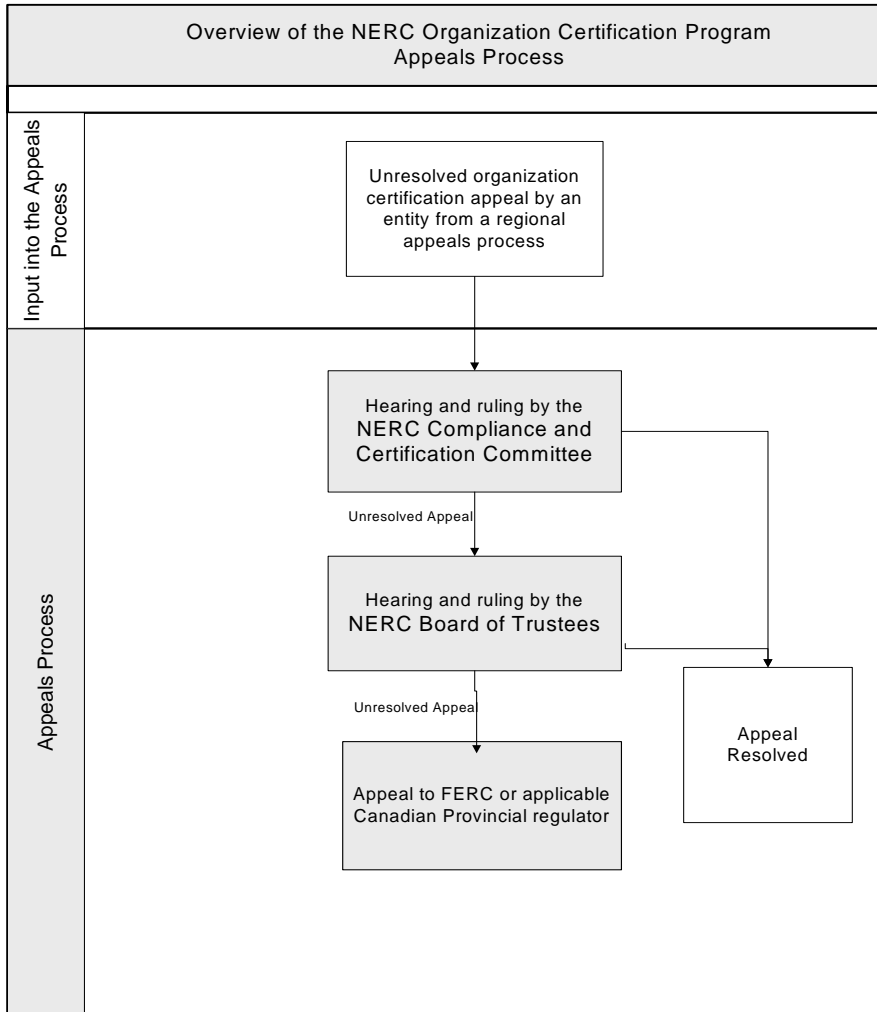
NERC's mission is to ensure that the bulk power system in North America is reliable, adequate, and secure. Since its formation in 1968, NERC has operated successfully as a voluntary, self-regulatory organization, relying on reciprocity, peer pressure, and the mutual self-interest of all those involved.

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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# NERC

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

## **Appendix 6**

# **System Operator Certification Program Manual**

**Effective January 18, 2007**

## Program Manual Changes

No.	Date	Section	Page	Description	Version
1	05/2005	All	All	Initial white paper expanded SOC Program to include CE hours	0
2	02/2006	All	All	Program Manual	1
3	06/2006	I and II	4, 17	Fees	1.1
4	06/2006	All	All	CEH to CE hours	1.1
5	08/2006	III	16	Training Providers retaining documentation	1

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## **Executive Summary**

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.

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	
Application to test	\$350
Application to retest	\$350
Application to withdraw	\$50
Bad check/credit	\$25

\*\*All funds shall be payable in U.S. dollars.

**Before scheduling an examination, please do the following:**

- Review all parts of this Program 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 42 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.

## System Operator Certificate Numbering Convention

Numbering certificates for certified system operators follows a specific convention. There have been two numbering conventions used since the start of the program.

The original credential, issued from 1998 into 2002, was the NERC Certified System Operator. These certificates were assigned the letter N followed by four digits indicating the year the candidate registered, followed by a four digit sequential number.

Example: N19980109 = NERC Certified System Operator that registered in 1998 and was the 109th system operator registered in the program.

When the specialty credentials were implemented in late 2002, a new numbering convention was implemented. The new numbering convention consists of a two-letter designation of the credential type, followed by six digits that indicate year and month the credential was awarded, followed by a three digit sequential number in that month.

Example: RA200306109 = NERC Certified Reliability Operator certified in June of 2003 and was the 109th system operator certified in that month.

### Credential Designations

N/RA/RC	Reliability Operator
BT	Combined Balancing and Interchange/Transmission Operator
BA	Balancing and Interchange Operator
TO	Transmission Operator

### 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 (CE hours) 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 CE hours 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 CE hours, in specific training topics, before their certificate expires to maintain their credential. The minimum number of CE hours is based on each credential:
  - a. 200 CE hours for Reliability Operator
  - b. 160 CE hours for Balancing, Interchange, and Transmission Operator
  - c. 140 CE hours for Balancing and Interchange Operator
  - d. 140 CE hours for Transmission Operator
4. A minimum of 30 CE hours must focus on content and/or implementation of NERC standards.
5. A minimum of 30 CE hours must be in simulations (i.e., table-top exercises, training simulators, emergency drills, practice emergency procedures, restoration, black start, etc.).
6. CE hours can concurrently count for both NERC standards and simulations but will only be counted once for the total CE hours 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 CE hour toward the total CE hours requirement. In other words, the CE hours 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 CE hours 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 CE hours, 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 CE Hours

CE hours 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 CE hours being issued.

## Specifics of the Credential Maintenance Program

Certified system operators are required to accumulate CE hours through the NERC Continuing Education 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 CE hours** within the 3-year period preceding the expiration date of their certificate.

The 140 CE hours must include:

- A minimum of 30 CE hours must focus on content and/or implementation of NERC Standards.
- A minimum of 30 CE hours 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 CE hours** within the 3-year period preceding the expiration date of their certificate.

The 140 CE hours must include:

- A minimum of 30 CE hours must focus on content and/or implementation of NERC Standards.
- A minimum of 30 CE hours 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 CE hours** within the 3-year period preceding the expiration date of their certificate.

The 160 CE hours must include:

- A minimum of 30 CE hours must focus on content and/or implementation of NERC standards.



- A minimum of 30 CE hours 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 CE hours** within the three-year period preceding the expiration date of their certificate.

The 200 CE hours must include:

- A minimum of 30 CE hours must focus on content and/or implementation of NERC standards.
- A minimum of 30 CE hours 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 CE hours 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 CE hours 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 CE hours.

During the time of suspension, the original anniversary date will be maintained. Therefore, should the system operator accumulate the required number of CE hours 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 CE hours 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 CE hours, the credential will be revoked and all CE hours 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. CE hours 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 CE hours 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.

CE hours will be allocated on a first-in, first-out basis. In other words, CE hours from a learning activity occurring first according to the calendar will be used to satisfy the CE hours requirement first and continuing sequentially by the date of the learning activities.

## **Reporting of CE Hours Earned by Certified System Operators**

Normally, the Providers will make the submittals of 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 CE hours from the Continuing Education 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 CE hours records at least 90 days before their certificate expiration date to allow sufficient time to acquire CE hours prior to the system operator's certificate expiration date should there be a deficit.

If a Provider does not submit the CE hours, the certified system operator must submit proof of sufficient CE hours to the NERC Manager of 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 CE hours 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 CE hours 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 CE hours 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 CE hours 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 CE hours 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 CE hours 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

CE hours will be recognized for credential maintenance only for training topics/learning activities listed in *Appendix A* and where Providers have complied with the Continuing Education Program rules.

#### Provider Access to Database

Providers will be able to access the database to upload certified system operator CE hours 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 CE hour 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 CE hours
- System operator's NERC certificate number

Training Providers shall retain comparable documentation. Electronic forms of documentation are acceptable.

#### Learning Activity Credit Only Once Per Year

CE hours 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: CE hours 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 12-month period preceding the system operator's credential anniversary)*

#### Learning Activity Approved Status Revoked after CE Hours Granted

CE hours 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 CE hour for each CE hours of a learning activity delivered will be recognized towards the instructor’s system operator credential maintenance. CE hours 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: CE hours 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 CE hours’ records in the NERC system operator certification database and to maintain their own training records to provide proof that CE hour requirements have been achieved.

**Fees**

<b>Fee Schedule**</b>	
Application to test	\$350
Application to maintain or change credential using CE hours	\$350
Application to retest	\$350
Application to withdraw	\$50
Bad check/credit application	\$25

\*\*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 CE hours.

### 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 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 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 CE hours.
- 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.

## Glossary

- G01. **CE Hour:** Sixty minutes of participation in a group, independent study, or self-study learning activity as approved by the NERC Continuing Education Program.
- G02. **Continuing Education 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 CE 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 CE hours 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. CE hours 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 CE hours 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 CE Hours:** 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

# NERC

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

## Appendix 7

# Reliability Readiness Evaluation and Improvement Program Procedure

Effective January 18, 2007

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## Executive Summary

This document sets forth the procedure NERC has adopted for use in its Reliability Readiness Evaluation and Improvement Program. The goal of the program is to assess the readiness of reliability coordinators (RC), balancing authorities (BA), transmission operators (TOP), and others performing delegated tasks for these operators to operate the bulk power system reliably, identify and promote examples of excellence, and identify opportunities for improvement in the pursuit of operational excellence. It is not a part of the compliance enforcement program. The evaluation team may also evaluate transmission planner and transmission owner functions in concert with the evaluation of RCs, BAs, and TOPs.

This procedure is to be applied using NERC reliability standards as a foundation, supplemented by other reference documents and evaluation 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 reliability tasks to other entities in carrying out their functions, while retaining overall responsibility for the reliability requirements. NERC may perform evaluations of these entities to ensure the delegation supports reliable operation of the bulk power system.

The NERC staff shall have overall responsibility for coordinating readiness evaluations in accordance with the following Readiness Evaluation Procedure as approved by the NERC Compliance and Certification Committee (CCC).

NERC shall have the primary responsibility for executing the steps in this procedure. The steps are summarized as follows:

- Development of overall evaluation schedule
- Initiation of evaluation process for an entity
- Provision of criteria and documentation
- Identification of readiness evaluation team members
- Coordination of entity to be evaluated and neighboring entity questionnaires
- Publication of findings

The evaluation team is tasked with reviewing an entity's questionnaire responses and documentation, performing the on-site evaluation, and preparing a report of its findings.

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## A. Scheduling

1. NERC staff in conjunction with the regional entities shall prepare a three-year cycle of readiness evaluations that will be updated by June 30 of each year.
  - a. RCs, BAs, TOPs, and other entities will be scheduled throughout the year according to a mutually agreed-upon schedule developed by NERC and the regional entities.
2. The regional entities will identify a contact person at each entity to be evaluated who shall be responsible for coordinating the on-site evaluation.
3. Readiness evaluations and compliance audits shall be conducted with separate processes, but may occur concurrently if separate personnel are used.
4. An evaluation team (the “team”) will be selected sixty days in advance of the evaluation. The team evaluating a balancing authority shall minimally consist of a balancing authority and its reliability coordinator; the team evaluating a reliability coordinator shall minimally consist of a reliability coordinator, one of its balancing authorities, and one of its transmission operators; and the team evaluating a transmission operator shall minimally consist of a transmission operator and reliability coordinator. Within this framework, the team will consist of the following members selected by the entity identified in parentheses:
  - a. One co-team leader (NERC staff)
  - b. One co-team leader - compliance manager/representative or designated alternate from region in which the entity being evaluated is located (regional entity)
  - c. One compliance manager/representative or designated alternate from another Interconnection (other regional entities)
  - d. Up to two representatives from different operating entities within the same region (region)
  - e. One representative from another region (other region)
  - f. One CCC representative not associated with the RC to serve on the RC readiness evaluation (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 evaluated (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.

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5. If an entity to be evaluated raises an objection to a team member's participation, it must do so in writing to NERC stating clearly the basis for the objection. Upon such receipt, NERC will attempt to resolve the issue to the mutual agreement of the entity being evaluated and the individual and/or entity for whom the individual is employed, utilizing guidance from the regional entities as appropriate.

If this process does not result in a mutually acceptable agreement, NERC will make a final determination using the following guidelines as a basis for supporting the objection:

- Team member was previously employed by entity to be evaluated within the previous three years.
  - Team member was previously employed by entity to be evaluated and whose employment ended unfavorably.
  - Team member is in active litigation with the entity to be evaluated.
  - Team member has a direct financial interest in the entity to be evaluated.
  - Team member is employed in a company under the same corporate umbrella as the entity to be evaluated.
  - The team member's employer and the entity to be evaluated are engaged in active litigation.
  - Other matters that may interfere with the exercise of independent judgment.
6. NERC shall develop and provide training in evaluation skills to all individuals who participate in readiness evaluations. Training for NERC team leaders and regional entity personnel shall be more comprehensive than training given to industry experts and regional members.
  7. To maintain the focus and size of the evaluation team, the use of observers will be limited. Observers must be expressly agreed upon by both NERC and the entity being evaluated. The role of observers is limited to observing the process. Observers shall not participate in the creation and editing of the report or its findings, or interfere with the evaluation process. The team leader may remove any observer from the evaluation who is not abiding by these criteria.

## **B. Pre-Evaluation**

1. An initial letter will be sent to the entity being evaluated at least sixty calendar days prior to the evaluation 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 evaluation.

In its submission to the request for information, the entity to be evaluated shall identify all tasks that have been delegated to another entity.

2. After receiving the initial request for information, and fifty calendar days prior to the evaluation, a questionnaire will be sent to the neighboring operating entities with whom the evaluated 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 evaluation.
3. All team members and observers shall sign and abide by a NERC confidentiality agreement prior to participating in any of the evaluation activities unless bound by NERC or other codes

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of conduct acknowledged by NERC to be acceptable. Copies of the signed confidentiality agreements shall be maintained by NERC and be available upon request by the evaluated entity.

4. The team will receive the following information upon receipt of the signed confidentiality agreements, and at least twenty-one calendar days prior to the evaluation:
  - a. The entity's completed questionnaire and electronic versions of any supporting documents sent by the entity to be evaluated
  - b. The neighboring operating entities' completed questionnaires
  - c. The on-site agenda.
5. Prior to the evaluation, NERC shall provide an agenda to the entity to be evaluated.
6. The team will coordinate before the on-site evaluation begins to review questionnaire responses, identify areas requiring further investigation, discuss concerns, coordinate the interview process, and assign responsibilities during the on-site visit.

### **C. On-Site Evaluation**

1. The team will meet on-site to conduct the readiness evaluation according to the agenda provided in advance. The team will conduct interviews with personnel, review documentation, and make observations about the entity's tools, facilities, and processes.
2. The team's findings will be based on data collected from the entity's questionnaire and documentation, neighboring operating entity questionnaires, and from observations, interview notes, 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 final readiness report.
4. Upon completion of the on-site evaluation, the team will give the entity a presentation of preliminary findings and recommendations that will be included in the final report.

### **D. Preparation and Posting of the Final Report**

1. The draft report will be completed by the team co-leaders, and will be sent to the team for review within fourteen calendar days of the on-site evaluation. The team will then have seven calendar days to respond to the draft 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 report will then be sent to the entity for its review to ensure that there are no mistakes in the report. The entity will have twenty-one calendar days to respond to the draft report. If the entity does not respond within that time, such nonresponse will be considered agreement with the content of the report. The entity may provide feedback in the form of corrections and clarifications that will be considered by the team for inclusion in the final report.

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3. After agreeing on any final corrections, the team may elect to provide the entity the opportunity to review the changes if deemed significant. Otherwise, the final report will be posted on the NERC Web site within sixty calendar days of the completion of the evaluation. Information deemed to be critical or sensitive to electrical infrastructure will be redacted before posting. The entity will make the determination about what information will be redacted.

Should the entity wish to provide comments regarding the final report, evaluation processes, findings, etc., the entity may provide a statement in writing that will be posted on the NERC Web site in conjunction with the final report.

4. In response to the posted report and within forty-five calendar days of the date of posting, the 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 NERC of its request for assistance.

## **E. Monitoring Recommendation Implementation**

1. 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 entity's implementation of the recommendations in the final report and the entity's response plan, and shall report progress to the board. NERC may elect to use the regional entities to coordinate the request for updated recommendation status for members within its area of oversight.

## **F. Examples of Excellence**

1. NERC shall identify and publish examples of excellence identified during the course of readiness evaluations. "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 evaluation or submitted to NERC for an on-site evaluation.

# NERC Blackout and Disturbance Response Procedures

Effective October 18, 2007

North American Electric Reliability Corporation

## **NERC Blackout and Disturbance Response Procedures**

### **Introduction**

NERC, through its professional staff and the regional entities and their members, provide the best source of technical and managerial expertise for responding to major events that affect the bulk power 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 regional entities and reliability coordinators, NERC will 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 will immediately notify appropriate government agencies and coordinate its analysis with them.

During the conduct of some NERC-level analyses, assistance may be needed from government agencies. Collaborative analysis with certain government agencies may be appropriate in some cases; e.g., collaborating with the Nuclear Regulatory Commission technical staff when a system event involves a nuclear unit. This assistance could include: authority to require data reporting from affected or involved parties; communications with other agencies of government; analyses 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 analysis is called for, government agencies should work in primarily an oversight and support role, in close coordination with the NERC analysis.

It is critical to establish, up front, a clear delineation of roles, responsibilities, and coordination requirements among industry and government for the analysis and reporting of findings, conclusions, and recommendations related to major blackouts, disturbances, or other emergencies affecting the bulk power system.

Depending on the severity and of the event and the area impacted, the event analysis may be conducted either by NERC or by the impacted RE. If the analysis is conducted by the regional entity, NERC staff, at least one member of the NERC Event Analysis Working Group (in addition to the Event Analysis Working Group member from the impacted regional entity), and other appropriate technical experts from the NERC community will participate as members of the regional entity analysis team.

A regional entity may request NERC to elevate an analysis to a NERC-level. In such cases, all team responsibilities will shift to NERC, and the regional entity may continue to participate in the analysis on appropriate teams.

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. data collection, 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 the collection of and analyze necessary initial data and information for the event;
- assist the regional entity-lead analysis with determining the need for supplemental technical expertise from the NERC community;
- issue initial findings, conclusions, and recommendations;
- maintain detailed data records (not subject to Freedom of Information Act);
- assist government agencies in criminal analyses when relevant;
- provide technical expertise for modeling and analyzing the event; 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 event 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

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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 – Effective October 18, 2007



these circumstances. If NERC and government agencies deem it necessary for further criminal analyses, NERC will issue a formal notice to affected systems to retain all relevant information gathered during this and subsequent phases of an analysis.

The specific criteria for reporting disturbances and other events are described in NERC Reliability Standard [EOP-004-1](#). 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 power 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.

### **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 power 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 analysis of the event should be conducted, and start to identify manpower requirements, data collection and retention requirements, and at what level the analysis should be conducted. If the event is localized within a region, NERC will participate in the event analysis of the regional entity.

### **Phase 3 — Data Collection, Investigation, Analysis, and Reporting**

Based on the scope, magnitude, and impact of an event, during Phase 3 NERC may:

1. perform an overview analysis of system and generator response;
2. rely on one of its regional entities to conduct the analysis and monitor the analysis results;
3. work with a regional entity in its analysis; or
4. conduct a NERC-level analysis.

The NERC CEO will decide, based on the initial situation assessment and consultation with the NERC technical committee officers<sup>2</sup>, if a NERC-level analysis is warranted. If a NERC-level analysis is to be conducted, the NERC CEO will appoint the Director of Events Analysis and Information Exchange to lead the analysis and assemble a high-level technical steering group to provide guidance and support throughout the analysis.

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<sup>2</sup> NERC will maintain a list of 24x7 contact information for its technical committee officers.

NERC reserves the right to elevate or augment an analysis performed by a regional entity pending the results of the regional entity analysis. Additional requests for analyses or supporting data may be made by NERC at any time in the investigation process.

A regional entity may request NERC to elevate an analysis to a NERC-level. In such cases, all team responsibilities will shift to NERC, and the regional entity may continue to participate in the analysis on appropriate teams.

If the analysis is to be lead by one of the regional entities, a member of the NERC staff, at least one member of the NERC Event Analysis Working Group (in addition to an Event Analysis Working Group member from the impacted regional entity), and other appropriate technical experts from the NERC community will participate as a triage team. The triage team will participate as members of the regional entity analysis team. The triage team will also will assist the regional entity with determining if additional technical expertise from the NERC community are needed for the analysis.

For NERC-level analyses, the first task of the Director of Events Analysis and Information Exchange 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 analysis. Secondly, the Director of Events Analysis and Information Exchange must issue requests for those resources and information. Third, the Director of Events Analysis and Information Exchange must organize the teams that will conduct and report on the analysis.

The teams needed for a particular analysis will vary with the nature and scope of the event. Attachment A describes the typical teams that would be required for a NERC-level analysis, and Attachment B provides suggested guidelines for the NERC-level analysis 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 event analyses, which it will adapt for specific analyses.

The Blackout and Disturbance Analysis Objectives, Approach, Schedule, and Status (Attachment D) and Guidelines for NERC Reports on Blackouts and Disturbances (Attachment E) are used to guide and manage analysis and reporting on major blackouts and disturbances.

A NERC-level analysis will comprise (a) collecting pertinent event data; (b) constructing a detailed sequence of events leading to and triggering the disturbance; (c) assembling system models and data and conducting detailed system analysis to simulate pre- and post-event conditions; and (d) issuing findings, conclusions, and recommendations. The details of these four phases of the analysis are:

**a. Collecting Pertinent Event Data**

- Collect all pertinent event logs, disturbance recorders, operator transcripts, and other system data.

**b. Detailed Sequence of Events**

- Construct a detailed sequence of events leading to and triggering the event. 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.

**c. Detailed System Analysis**

- Assess the sequence of events to determine critical times for study.
- Assemble the necessary system models and data from regional entity and operating entities to accurately model (with power flow and dynamic simulations) the pre-event conditions.<sup>3</sup> Determine pre-event conditions at critical times prior to event initiation, including an assessment of reliability margins in the pre-event time frame.
- Analyze data from phasor measurement units, high-speed data recorders, digital fault recorders, digital relays, 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.

**d. Findings, Conclusions, and Recommendations**

- Identify and assess failures contributing to the event, 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.
- 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.
- 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 is adequately designed.
- All compliance issues will be referred to the NERC Director of Compliance.

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<sup>3</sup> NERC is developing standards for data and model validation that will facilitate modeling activities in future blackout analyses.

<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.

<sup>5</sup> NERC will rely on root cause analysis experts, both from within the industry and outside consultants, to conduct these analyses.

**Phase 4 — Follow-up on Recommendations**

For Phase 4 NERC and the regional entities will follow up on specific recommendations coming from all analyses, whether done at the regional entity or NERC level. In certain cases, where government agencies have taken a direct role in the analysis, reports will be made to those agencies on progress in addressing the recommendations.

## Typical Team Assignments for Analysis of 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 entity 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

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<sup>6</sup> The analysis 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.

**Communications Teams**

- Press releases
- Interface with government agencies
- Interviews

## NERC Blackout and Disturbance Response Procedures Guidelines for Analysis Team Scopes

Each blackout or disturbance is unique and will therefore demand a customized approach to its analysis. The following guidelines for analysis team scopes are suggestive rather than definitive. Not all the teams listed may be needed for a particular analysis.

**Data Requests and Management** — This team organizes large volumes of raw data and value-added information produced by analysts in support of the blackout analysis 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 analysis. The team serves as the single point for issuing data requests, receiving and storing data, and managing data queries by the 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 analysis, 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 analysis 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 to recreate the entire blackout sequence, simulation methods will reveal the mode(s) of failure initiating the blackout and propagating through the system.

**Root Cause Analysis** — Root cause analysis guides the overall analysis 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 analysis 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 analysis 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 analysis process to develop a factual record leading to logical and defensible conclusions in the final report regarding the causes of the blackout.

**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 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.

**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.

**Analysis Process and Procedures Review** — This team will review the process and procedures used in the analysis of the blackout, make recommendations for improvement, and develop recommendations for appropriate processes, procedures, forms, etc. to guide and expedite future analyses including coordination and cooperation between NERC, its regional entities, 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 and RE Standards/Procedures and Compliance** — This team reviews the adequacy of NERC Reliability Standards, regional entity standards and procedures, and the compliance monitoring program to address issues leading to the blackout. The team also reviews the compliance of the affected operating entities with Reliability Standards. For less significant event analyses, this team may not be needed. However, all compliance issues will be referred to the NERC Director of Compliance.

**NERC CONFIDENTIALITY AGREEMENT  
FOR  
ANALYSIS OF BLACKOUTS AND DISTURBANCES**

This Confidentiality Agreement (“Agreement”), dated \_\_\_\_\_, is between the North American Electric Reliability Corporation (“NERC”), and

\_\_\_\_\_, a member of the NERC Event Analysis Team (“Team Member”)(collectively referred to as “Parties”).

**WHEREAS**, NERC is conducting an analysis of the power event that occurred in \_\_\_\_\_ on \_\_\_\_\_ and related matters (“Event”); and

**WHEREAS**, NERC has established a team to carry out that analysis (“Event Analysis Team”); and

**WHEREAS**, in order for the Event Analysis Team to fulfill its objectives, it is necessary for the Event Analysis 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 “Event Analysis Information” means all information related in any way to the Event that operating entities within the \_\_\_\_\_ or their representatives have furnished or are furnishing to NERC in connection with NERC’s analysis of the Event, 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 Event Analysis Team or its representatives that contains, reflects or is derived from the furnished Event Analysis Information; provided, however, the term “Event Analysis 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 Event Analysis Team.

2. The Team Member understands and agrees that the Event Analysis Information is being made available solely for purposes of the Event Analysis and that the Event Analysis 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 Event Analysis 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 shall not be deemed to prohibit Team Member from disclosing Event Analysis Information to NERC Blackout and Disturbance Response Procedures – Effective October 18, 2007

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 Event Analysis 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 Event Analysis Information to an Event Analysis 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 CORPORATION**

By: \_\_\_\_\_

Printed: \_\_\_\_\_

Title: \_\_\_\_\_

**NERC EVENT ANALYSIS TEAM MEMBER**

Signed: \_\_\_\_\_

Printed: \_\_\_\_\_

**NERC Blackout and Disturbance Analysis Objectives, Analysis Approach, Schedule, and Status**

Analysis Objective	Analysis Approach	Schedule	Status
<b>Pre-Event Conditions</b>			
1. What was the precursor sequence of events leading to the event?	<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 event initiation.</li> <li>• Reconcile the precursor sequence of events with those emerging from REs, RTOs, and operating entities.</li> </ul>		
2. What time frames are relevant for pre-event 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 REs organizations, RTOS, and operating entities.</li> </ul>		
3. What models and data can best simulate system conditions prior to and during the 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 powerflow 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 REs, 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>		

Analysis Objective	Analysis Approach	Schedule	Status
<p>4. What system conditions existed in the precursor time horizon leading up to the event (at the times identified in 1.)?</p>	<ul style="list-style-type: none"> <li>• Obtain and manage data for powerflow: 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 powerflow simulations.</li> <li>• Work with REs, RTOs, and operating entities to develop powerflow cases defining the base conditions for each relevant time, ensuring the powerflows model each critical juncture leading up to the event.</li> <li>• Identify and review results of additional studies completed by reliability coordinators, RTOs and operating entities.</li> <li>• Assess the powerflow 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 event 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 REs, 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, fault recorder data disturbance recorder data, and synchro-phasor measurement to establish a detailed sequence of events that initiated the event.</li> <li>• Identify the sequence of events that directly led to the event.</li> <li>• Review and reconcile these trigger events with REs, RTO, and operating entity analyses.</li> </ul>		
<p>7. What was the sequence of events during the event?</p>	<ul style="list-style-type: none"> <li>• Evaluate logs and disturbance recorder data to establish sequence during the blackout. (The event sequence may follow multiple tracks.)</li> <li>• Review and reconcile this sequence with those constructed by REs, 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>		

Analysis Objective	Analysis Approach	Schedule	Status
8. What was the cause of the event in terms of electrical conditions and other related 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 event?	<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 REs, and operating entities.</li> </ul>		
9. Why did the event extend as far as it did? What arrested the event from extending further into other systems?	<ul style="list-style-type: none"> <li>• Using advanced analysis techniques, assess where and why the event was arrested.</li> </ul>		
10. How did affected non-nuclear generators respond during the event? 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 action, generator control functions, or generator protection systems contribute to the event?	<ul style="list-style-type: none"> <li>• Prepare a table of affected generators and actions they made leading up to and during the event, 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 REs, 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, assisting in their analyses where appropriate.</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 REs, 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 event? Did they operate correctly or not?	<ul style="list-style-type: none"> <li>• Assess each automatic trip of a transmission or generator facility for proper or improper relay actions.</li> <li>• Assemble and review RE and operating entity reviews of logs, disturbance reports, and relay targets/logs and reconcile with NERC data.</li> </ul>		

<b>Analysis Objective</b>	<b>Analysis Approach</b>	<b>Schedule</b>	<b>Status</b>
14. Was any equipment damaged during the event?	<ul style="list-style-type: none"> <li>Request information from REs, and companies on equipment damage, as appropriate.</li> <li>Assess any transmission or generation facilities sustaining damage during the event, and extent of damage.</li> </ul>		
15. Did SCADA/EMS and data communications systems operate correctly during the event? What problems were noted?	<ul style="list-style-type: none"> <li>Request information from REs, 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>			
16. What NERC reliability standards were applicable to the event? What violations occurred? Were NERC standards and policies sufficient?	<ul style="list-style-type: none"> <li>Compliance staff review NERC standards relevant to the event and perform a compliance review.</li> </ul>		
17. What RE reliability standards were applicable to the event? What violations occurred? Were RE standards and policies sufficient?	<ul style="list-style-type: none"> <li>Request REs to review applicable standards and report compliance with those standards during the event.</li> </ul>		
18. Were any special operating procedures or other operating guidelines in effect and being observed leading up to the event? Were these procedures sufficient?	<ul style="list-style-type: none"> <li>Review and analyze loop flow procedures with involved REs 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 RTOs, TOs, CAs to review applicable standards and compliance with existing reliability procedures and standards during the event, and report results.</li> </ul>		
<b>Maintenance</b>			
20. Are there any indications that maintenance of transmission or generation facilities may have contributed to the event?	<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 RE assessments of maintenance issues that may have contributed to the event.</li> </ul>		

<b>Personnel, Procedures, and Communications</b>			
21. What conditions were operators and reliability coordinators aware of leading up to and during the event? 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 event? 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 event, 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 event 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 REs.</li> <li>• Review the actions of the affected reliability coordinators to determine if they performed according to plans.</li> <li>• Assess whether inter-area communications were effective, both at the control area and reliability coordinator levels.</li> </ul>		
<b>System Restoration</b>			
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 REs 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>			
28. Were the conditions leading up to the event within the design and planning criteria for the transmission systems involved?	<ul style="list-style-type: none"> <li>Request transmission owners and REs 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>			
29. From a technical perspective, what are the root causes of this event? What additional technical factors contributed to making the event 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 analysis regarding technical failures leading to the event? What actions are recommended to avoid similar future events and improve bulk electric system reliability? What issues may be inconclusive and require future analysis?	<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 Event

#### 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-event 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

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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. Interregional transactions
    - 2.2.5.1. Calculated transfer limits
    - 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. Event Key Parameters
    - 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 event
      - 5.1.1. Analysis of frequency anomalies
      - 5.1.2. Effect of time error correction
    - 5.2. Frequency analysis of the event
      - 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. RE 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. RE 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 analysis

##### 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. RE audits

###### 8.1.2.1.1. Compliance with NERC and RE standards

##### 8.1.2.2. Updated findings based on analysis

##### 8.1.2.3. Post blackout audit results and findings

##### 8.1.2.4. Recommendations for future audits

#### 8.2. RE 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 Events**

### 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 Events

## **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. Analysis Process**

- 11.1. Description of process
  - 11.1.1. Organization
  - 11.1.2. Coordination with US-Canada Task force
  - 11.1.3. Coordination with RE and RTOs
  - 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 analyses