

North American Electric Reliability Corporation (NERC)

Rules of Procedure

Effective in Manitoba

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Appendix 3B – Election Procedure for Members of NERC Standards Committee	January 18, 2007	
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in Manitoba Regulations

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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, or 2) completed the hearing and appeals process within NERC, or 3) allowed the time for submitting an appeal to expire, or 4) admitted to the violation in a settlement agreement.

"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.

“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 entity 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 classes¹ 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.

¹ 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.

- 2.3 **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.
- 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 *Standard Processes Manual*, 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 *Standard Processes Manual*. Any amendments or revisions to the *Standard Processes Manual* 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 *Standard Processes Manual* 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 *Standard Processes Manual*. 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 *Standard Processes Manual* (**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 *Standard Processes Manual* 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 *Standard Processes Manual*. 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 expedited 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. If the Board of Trustees determines that the standards process did not result in a standard that addresses a specific matter that is identified in a directive issued by an applicable ERO governmental authority, then Rule 321 of these Rules of Procedure shall apply.
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 expedited action procedures described in the *Standard Processes Manual* 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. If the Board of Trustees determines that the standards process did not result in a standard that addresses a specific matter that is identified in a directive issued by an applicable ERO governmental authority, then Rule 321 of these Rules of Procedure shall apply, with appropriate modification of the timeline.
 - 3.1 Consistent with all reliability standards developed under the expedited action process, each of the three possible follow-up actions as documented in the *Standard Processes Manual* 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 Standard Processes Manual* 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.

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315. Revisions to NERC Reliability Standards Development Procedure

Any person or entity may submit a written request to modify NERC *Standard Processes Manual*. Consideration of the request and development of the revision shall follow the process defined in the NERC *Standard Processes Manual*. 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 *Standard Processes Manual*. 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 *Standard Processes Manual*.

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.

321. Special Rule to Address Certain Regulatory Directives

In circumstances where this Rule 321 applies, the Board of Trustees shall have the authority to take one or more of the actions set out below. The Board of Trustees shall have the authority to choose which one or more of the actions are appropriate to the circumstances and need not take these actions in sequential steps.

1. The Standards Committee shall have the responsibility to ensure that standards drafting teams address specific matters that are identified in directives issued by applicable ERO governmental authorities. If the Board of Trustees is presented with a proposed standard that fails to address such directives, the Board of Trustees has the authority to remand, with instructions (including establishing a timetable for action), the proposed reliability standard to the Standards Committee.
2. Upon a written finding by the Board of Trustees that a ballot pool has failed to approve a proposed reliability standard that contains a provision to address a specific matter identified in a directive issued by an ERO governmental authority, the Board of Trustees has the authority to remand the proposed reliability standard to the Standards Committee, with instructions to (i) convene a public technical conference to discuss the issues surrounding the regulatory directive, including whether or not the proposed standard is just, reasonable, not unduly

discriminatory or preferential, in the public interest, helpful to reliability, practical, technically sound, technically feasible, and cost-justified; (ii) working with NERC staff, prepare a memorandum discussing the issues, an analysis of the alternatives considered and other appropriate matters; and (iii) re-ballot the proposed reliability standard one additional time, with such adjustments in the schedule as are necessary to meet the deadline contained in paragraph 2.1 of this Rule.

- 2.1 Such a re-ballot shall be completed within forty-five (45) days of the remand. The Standards Committee memorandum shall be included in the materials made available to the ballot pool in connection with the re-ballot.
 - 2.2 In any such re-ballot, negative votes without comments related to the proposal shall be counted for purposes of establishing a quorum, but only affirmative votes and negative votes with comments related to the proposal shall be counted for purposes of determining the number of votes cast and whether the proposed standard has been approved.
3. If the re-balloted proposed reliability standard achieves at least an affirmative two-thirds majority vote of the weighted segment votes cast, with a quorum established, then the proposed reliability standard shall be deemed approved by the ballot pool and shall be considered by the Board of Trustees for approval.
4. If the re-balloted proposed reliability standard fails to achieve at least an affirmative two-thirds majority vote of the weighted segment votes cast, but does achieve at least a sixty percent affirmative majority of the weighted segment votes cast, with a quorum established, then the Board of Trustees has the authority to consider the proposed reliability standard for approval under the following procedures:
 - 4.1 The Board of Trustees shall issue notice of its intent to consider the proposed reliability standard and shall solicit written public comment particularly focused on the technical aspects of the provisions of the proposed reliability standard that address the specific matter identified in the regulatory directive, including whether or not the proposed standard is just, reasonable, not unduly discriminatory or preferential, in the public interest, helpful to reliability, practical, technically sound, technically feasible, and cost-justified.
 - 4.2 The Board of Trustees may, in its discretion, convene a public technical conference to receive additional input on the matter.

- 4.3 After considering the developmental record, the comments received during balloting and the additional input received under paragraphs 4.1 and 4.2 of this Rule, the Board of Trustees has authority to act on the proposed reliability standard.
 - 4.3.1 If the Board of Trustees finds that the proposed reliability standard is just, reasonable, not unduly discriminatory or preferential, and in the public interest, considering (among other things) whether it is helpful to reliability, practical, technically sound, technically feasible, and cost-justified, then it has authority to approve the proposed reliability standard and direct that it be filed with applicable ERO governmental authorities with a request that it be made effective.
 - 4.3.2 If the Board of Trustees is unable to find that the proposed reliability standard is just, reasonable, not unduly discriminatory or preferential, and in the public interest, considering (among other things) whether it is helpful to reliability, practical, technically sound, technically feasible, and cost-justified, then it has authority to treat the proposed reliability standard as a draft reliability standard and direct that the draft reliability standard and complete developmental record, including the additional input received under paragraphs 4.1 and 4.2 of this Rule, be filed with the applicable ERO governmental authorities as a compliance filing in response to the order giving rise to the regulatory directive, along with a recommendation that the standard not be made effective and an explanation of the basis for the recommendation.
- 5. Upon a written finding by the Board of Trustees that standard drafting team has failed to develop, or a ballot pool has failed to approve, a proposed reliability standard that contains a provision to address a specific matter identified in a directive issued by an ERO governmental authority, the Board of Trustees has the authority to direct the Standards Committee (with the assistance of stakeholders and NERC staff) to prepare a draft reliability standard that addresses the regulatory directive, taking account of the entire developmental record pertaining to the matter. If the Standards Committee fails to prepare such draft reliability standard, the Board of Trustees may direct NERC management to prepare such draft reliability standard.

- 5.1 The Board of Trustees may, in its discretion, convene a public technical conference to receive input on the matter. The draft reliability standard shall be posted for a 45-day public comment period.
- 5.2 If, after considering the entire developmental record (including the comments received under paragraph 5.1 of this Rule), the Board of Trustees finds that the draft reliability standard, with such modifications as the Board of Trustees determines are appropriate in light of the comments received, is just, reasonable, not unduly discriminatory or preferential, and in the public interest, considering (among other things) whether it is practical, technically sound, technically feasible, cost-justified and serves the best interests of reliability of the bulk power system, then the Board of Trustees has the authority to approve the draft standard and direct that the proposed standard be filed with ERO governmental authorities with a request that the proposed standard be made effective.
- 5.3 If, after considering the entire developmental record (including the comments received under paragraph 5.1 of this Rule), the Board of Trustees is unable to find that the draft reliability standard, even with modifications, is just, reasonable, not unduly discriminatory or preferential, and in the public interest, considering (among other things) whether it is practical, technically sound, technically feasible, cost-justified and serves the best interests of reliability of the bulk power system, then the Board of Trustees has the authority to direct that the draft standard and complete developmental record be filed as a compliance filing in response to the regulatory directive with the ERO governmental authority issuing the regulatory directive, with a recommendation that the draft standard not be made effective.
- 5.4 The filing of the reliability standard under either paragraph 5.2 or paragraph 5.3 of this Rule shall include an explanation of the basis for the decision by the Board of Trustees.
- 5.5 A reliability standard approved under paragraph 5 of this Rule shall not be eligible for submission as an American National Standard.
- 6. NERC shall on or before March 31st of each year file a report with applicable ERO governmental authorities on the status and timetable for addressing each outstanding directive to address a specific matter received from an applicable ERO governmental authority.

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SECTION 500 — ORGANIZATION REGISTRATION AND CERTIFICATION

501. Scope of the Organization Registration and Organization Certification Programs

The purpose of the Organization Registration Program is to clearly identify those entities that are responsible for compliance with the FERC approved reliability standards.

Organizations that are registered are included on the NERC Compliance Registry (NCR) and are responsible for knowing the content of and for complying with all applicable reliability standards. Registered organizations are not and do not become members of NERC or a Regional Entity, by virtue of being listed on the NCR. 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.

The purpose of the Organization Certification Program is to ensure that the new entity (i.e., applicant to be an RC, BA, or TOP that is not already performing the function for which it is applying to be certified as) has the tools, processes, training, and procedures to demonstrate their ability to meet the requirements/sub requirements of all of the reliability standards applicable to the function(s) for which it is applying thereby demonstrating the ability to become certified and then operational.

Organization Registration and Organization Certification may be delegated to Regional Entities in accordance with the procedures in this Section 500; the NERC *Organization Registration and Organization Certification Manual*, which is incorporated into these rules as Appendix 5A; and, approved Regional Entity delegation agreements or other applicable agreements.

1. **NERC Compliance Registry** — NERC shall establish and maintain the NCR of the bulk power system owners, operators, and users that are subject to approved reliability standards.
 - 1.1 (a) The NCR shall set forth the identity and functions performed for each organization responsible for meeting requirements/sub-requirements of the reliability standards. Bulk power system owners, operators, and users (i) shall provide to NERC and the applicable Regional Entity information necessary to complete the registration, and (ii) shall provide NERC and the applicable Regional Entity with timely updates to information concerning the registered entity's ownership, operations, contact information, and other information that may affect the registered entity's registration status or other information recorded in the compliance registry.
 - (b) A generation or transmission cooperative, a joint-action agency or another organization may register as a Joint Registration Organization (JRO), in lieu of each of the JRO's members or related entities being registered individually for one or more functions. Refer to Section 507.

(c) Multiple entities may each register using a Coordinated Functional Registration (CFR) for one or more reliability standard(s) and/or for one or more requirements/sub-requirements within particular reliability standard(s) applicable to a specific function pursuant to a written agreement for the division of compliance responsibility. Refer to Section 508.

- 1.2 In the development of the NCR, NERC and the Regional Entities shall determine which organizations should be placed on the NCR based on the criteria provided in the NERC *Statement of Compliance Registry Criteria* which is incorporated into these rules as Appendix 5B.
- 1.3 NERC and the Regional Entities shall use the following rules for establishing and maintaining the NCR based on the registration criteria as set forth in Appendix 5B *Statement of Compliance Registry Criteria*:
 - 1.3.1 NERC shall notify each organization that it is on the NCR. The entity is responsible for compliance with all the reliability standards applicable to the functions for which it is registered from the time it receives the registration notification from NERC.
 - 1.3.2 Any organization receiving such a notice may challenge its placement on the NCR according to the process in Appendix 5A *Organization Registration and Organization Certification Manual*, Section V.
 - 1.3.3 The Compliance Committee of the Board of Trustees shall promptly issue a written decision on the challenge, including the reasons for the decision.
 - 1.3.4 The decision of the Compliance Committee of the Board of Trustees shall be final unless, within 21 days of the date of the Compliance Committee of the Board of Trustees decision, the organization appeals the decision to the applicable governmental authority.
 - 1.3.5 Each entity identified on the NCR shall notify its corresponding Regional Entity(s) of any corrections, revisions, deletions, 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 the standards applicable to its associated registration.
- 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 unnecessary 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 entities² are under the responsibility of one and only one Reliability Coordinator.
- 1.4.3 Ensure that all transmission facilities 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 the NCR of organizations responsible for meeting the requirements/sub-requirements of the reliability standards currently in effect on its Web site and shall update the NCR monthly.
- 2. **Entity Certification** — NERC shall provide for certification of all entities with primary reliability responsibilities requiring certification. This includes those entities that satisfy the criteria established in the NERC Provisional Certification Process. The NERC programs 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.
 - 2.2 Evaluate and certify each applicant's ability to meet the requirements for certification.
 - 2.3 Maintain process documentation.
 - 2.4 Maintain records of currently certified entities.
 - 2.5 Issue a certification document to the applicant that successfully demonstrates its competency to perform the evaluated functions.

² 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. Delegation and Oversight

- 3.1 NERC may delegate responsibilities for Organization Registration and Organization 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 Organization Registration and Organization Certification Programs in accordance with such delegations to meet NERC's programs goals and requirements subject to NERC oversight.
- 3.2 NERC shall develop and maintain a plan to ensure the continuity of Organization Registration and Organization Certification within the geographic or electrical boundaries of a Regional Entity in the event that no entity is functioning as a Regional Entity for that region, or the Regional Entity withdraws as a Regional Entity, or does not operate its Organization Registration and Organization Certification Programs in accordance with delegation agreements.
- 3.3 NERC shall develop and maintain a program to monitor and oversee the NERC Organization Registration and Organization Certification Programs activities that are delegated to each Regional Entity through a delegation agreement or other applicable agreement.
 - 3.3.1 This program shall monitor whether the Regional Entity carries out those delegated activities in accordance with NERC requirements, and whether there is consistency, fairness of administration, and comparability.
 - 3.3.2 Monitoring and oversight shall be accomplished through direct participation in the Organization Registration and Organization Certification Programs with periodic reviews of documents and records of both programs.

502. Organization Registration and Organization Certification Program Requirements

- 1. NERC shall maintain the Organization Registration and Organization Certification Programs.
 - 1.1 The roles and authority of Regional Entities in the programs are delegated from NERC pursuant to the Rules of Procedure through regional delegation agreements or other applicable agreements.
 - 1.2 Processes for the programs shall be administered by NERC and the Regional Entities. Materials that each Regional Entity uses are subject to review and approval by NERC.

- 1.3 The appeals process for the Organization Registration and Organization Certification Programs are identified in Appendix 5A *Organization Registration and Organization Certification Manual*, Sections V and VI, respectively.
- 1.4 The certification team membership is identified in Appendix 5A *Organization Registration and Organization Certification Manual*, Section IV.8.d.
2. To ensure consistency and fairness of the Organization Registration and Organization Certification Programs, NERC shall develop procedures to be used by all Regional Entities and NERC in accordance with the following criteria:
 - 2.1 NERC and the Regional Entities shall have data management processes and procedures that provide for confidentiality, integrity, and retention of data and information collected.
 - 2.2 Documentation used to substantiate the conclusions of the Regional Entity/ NERC related to registration and/or certification must be retained by the Regional Entity for (6) six years, unless a different retention period is otherwise identified, for the purposes of future audits of these programs.
 - 2.3 To maintain the integrity of the NERC Organization Registration and Organization Certification Programs, NERC, Regional Entities, certification team members, program audit team members (Section 506), and committee members shall maintain the confidentiality of information provided by an applicant or entities.
 - 2.2.1 NERC and the Regional Entities shall have appropriate codes of conduct and confidentiality agreements for staff, certification team, certification related committees, and certification program audit team members.
 - 2.2.2 NERC, Regional Entities, certification team members, program audit team members and committee members shall maintain the confidentiality of any registration or certification-related discussions or documents designated as confidential (see Section 1500 for types of confidential information).
 - 2.2.3 NERC, Regional Entities, certification team members, program audit team members and committee members shall treat as confidential the individual comments expressed during evaluations, program audits and report-drafting sessions.
 - 2.2.4 Copies of notes, draft reports, and other interim documents developed or used during an entity certification evaluation or program audit shall be destroyed after the public posting of a final, uncontested report.

- 2.2.5 Information deemed by an applicant, entity, a Regional Entity, or NERC as confidential, including critical energy infrastructure information, shall not be released publicly or distributed outside of a committee or team.
- 2.2.6 In the event that an individual violates any of the confidentiality rules set forth above, that individual and any member organization with which the individual is associated will 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.
- 2.2.7 NERC shall develop and provide training in auditing skills to all individuals prior to their participation in certification evaluations. Training for certification team leaders shall be more comprehensive than the training given to industry subject matter experts and Regional Entity members. Training for Regional Entity members may be delegated to the Regional Entity.
- 2.4 An applicant 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 for which it has demonstrated full competency.
 - 2.4.1 All NERC certified entities shall be included on the NCR.

503. Regional Entity Implementation of Organization Registration and Organization 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 Organization Certification to the Regional Entity through a delegation agreement.
- 2. **Registration** — The following Organization Registration activities shall be managed by the Regional Entity per the NERC *Organization Registration and Organization Certification Manual*, which is incorporated into the Rules of Procedure as Appendix 5A *Organization Registration and Organization Certification Manual*:
 - 2.1 Regional entities shall verify that all Reliability Coordinators, Balancing Authorities, and Transmission Operators meet the registration requirements of Section 501(1.4).
- 3. **Certification** — The following Organization certification activities shall be managed by the Regional Entity in accordance with an approved delegation agreement or another applicable agreement:

- 3.1 An entity seeking certification to perform one of the functions requiring certification shall contact the Regional Entity for the region(s) in which it plans to operate to apply for certification.
- 3.2 An entity seeking certification and other affected entities shall provide all information and data requested by NERC or the Regional Entity to conduct the certification process.
- 3.3 Regional Entities shall notify NERC of all certification applicants.
- 3.4 NERC and/or the Regional Entity shall evaluate the competency of entities requiring certification to meet the NERC certification requirements.
- 3.5 NERC or the Regional Entity shall establish certification procedures to include evaluation processes, schedules and deadlines, expectations of the applicants and all entities participating in the evaluation and certification processes, and requirements for certification team members.
 - 3.5.1 The NERC / 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 (including requesting a demonstration of all tools identified in the certification process), reviewing all necessary documents and data (including all agreements, processes, and procedures identified in the certification process), reviewing certification documents and projected system operator work schedules, and reviewing any additional documentation needed to support the completed questionnaire or inquiries arising during the site visit.
 - 3.5.2 The NERC/ Regional Entity certification procedures will provide for preparation of a written report by the certification team, detailing any deficiencies that must be resolved prior to granting certification, along with any other recommendations for consideration by the applicant, the Regional Entity, or NERC.

504. Appeals

- 1. NERC shall maintain an appeals process to resolve any disputes related to registration or certification activities per the *Organization Registration and Organization Certification Manual*, which is incorporated in these rules as Appendix 5A.
- 2. The Regional Entity certification appeals process shall culminate with the regional board or a committee established by and reporting to the regional board as the final adjudicator, provided that 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 (Appendix 5A *Organization Registration and Organization Certification Manual*).

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 Organization Certification Programs.

506. Independent Audit of NERC Organization Registration and Organization Certification Program

1. NERC, through the Compliance and Certification Committee, shall provide for an independent audit of its Organization Registration and Organization Certification Programs 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, effectiveness and consistency of the NERC Organization Registration and Organization Certification Programs.
3. The final report shall be posted by NERC for public viewing.
4. If the audit report includes recommendations to improve the program, the administrators of the program shall provide a written response to the Board within 30 days of the final report, detailing the disposition of each and every recommendation, including an explanation of the reasons for rejecting a recommendation and an implementation plan for the recommendations accepted.

507. Provisions Relating to Joint Registration Organizations (JRO)

1. In addition to registering as the entity responsible for all functions that it performs itself, an entity may register as a JRO on behalf of one or more of its members or related entities for one or more functions for 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 for that function or those functions including all reporting requirements. Any entity seeking to register as a JRO must submit a written agreement with its members or related entities for all requirements/sub-requirements for the function(s) for which the entity is registering for and takes responsibility for, which would otherwise be the responsibility of one or more of its members or related entities. Neither NERC nor the Regional Entity shall be parties to any such agreement, 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 JRO registration.

2. The JRO registration data must include the same registration information as a normal compliance registration entry. The JRO is responsible for providing all of the information and data, including submitting reports, as needed by the Regional Entity for performing assessments of compliance.
3. The Regional Entity shall notify NERC of each JRO that the Regional Entity accepts. The notification will identify the point of contact and the function(s) being registered for on behalf of its members or related entities.
4. For purposes of compliance audits, the Regional Entity shall keep a list of all JROs. This document shall contain a list of each JRO's members or related entities and the function(s) for which the JRO is registered for that member(s) or related entity(s). It is the responsibility of the JRO to provide the Regional Entity with this information as well as the applicable JRO agreement(s).
5. The Regional Entity may request clarification of any list submitted to it that identifies the members of the JRO and may request such additional information as the Regional Entity deems appropriate.
6. The Regional Entity's acceptance of a JRO shall be a representation by the Regional Entity to NERC that the Regional Entity has concluded the JRO will meet the registration requirements of Section 501(1.4).
7. NERC shall maintain, and post on its Web site, a JRO registry listing all JRO registrations that have been reviewed and accepted by the Regional Entity. The posting shall identify the JRO entity taking compliance responsibilities for itself and its members.
8. The JRO shall inform the Regional Entity of any changes to an existing JRO. The Regional Entity shall promptly notify NERC of each such revision.
9. Nothing in 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/sub-requirement of a reliability standard shall inform the JRO of its registration.

508. Provisions Relating to Coordinated Functional Registration (CFR) Entities

1. In addition to registering as an entity responsible for all functions that it performs itself, multiple entities may each register using a CFR for one or more reliability standard(s) and/or for one or more requirements/sub-requirements within particular reliability standard(s) applicable to a specific function. The CFR submission must include a written agreement that governs itself and clearly specifies the entities' respective compliance responsibilities. The registration of

the CFR is the complete registration for each entity. Additionally, each entity shall take full compliance responsibility for those standards and/or requirements/sub-requirements it has registered for in the CFR. Neither NERC nor the Regional Entity shall be parties to any such agreement, 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 CFR.

2. Each CFR or each individual entity within a CFR must identify a point of contact that is responsible for providing information and data, including submitting reports as needed by the Regional Entity related to the CFR registration.
3. The Regional Entity shall notify NERC of each CFR that the Regional Entity accepts.
4. NERC or the Regional Entity may request clarification of any list submitted to it that identifies the compliance responsibilities of the CFR and may request such additional information as NERC or the Regional Entity deems appropriate.
5. The Regional Entity's acceptance of that CFR shall be a representation by the Regional Entity to NERC that the Regional Entity has concluded the CFR will meet the registration requirements of Section 501(1.4).
6. NERC shall maintain, and post on its Web site, a CFR registry listing all CFR registrations that have been accepted by NERC or by a Regional Entity. The posting shall clearly list all the reliability standards or requirements/sub-requirements thereof for which each entity of the CFR is responsible for under the CFR.
7. The point of contact shall inform the Regional Entity of any changes to an existing CFR. The Regional Entity shall promptly notify NERC of each such revision.
8. In the event of a violation of a reliability standard or of a requirement/sub requirement of a reliability standard for which an entity of a CFR is registered, that entity shall be identified in the notice of alleged violation and shall be assessed the sanction or penalty in accordance with the NERC Sanctions Guidelines. In the event a Regional Entity is not able to determine which entity(ies) is responsible for a particular reliability standard, or requirements/sub requirements thereof that has been violated, the Regional Entity shall investigate the noncompliance in accordance with the NERC Rules of Procedure Section 400, *Compliance Enforcement*, to determine the entity(ies) to which the Regional Entity shall to issue the sanction or penalty for the violation.
9. Nothing in Section 508 shall preclude an entity registered in a CFR, 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 entity is registering. An entity

registered in a CFR that registers as responsible for any reliability standard or requirement/sub requirement of a reliability standard shall inform the point of contact 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.

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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 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, 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 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 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, 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 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 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 and its members. For cases of inadequate capacity or reserve margin, the regional entity 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. 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 entities 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 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 and the North American interconnected bulk power system for the period of the assessment. While the regional entities 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. 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. The regional entities 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.

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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, 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

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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 Standards 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 scheduled and conducted for each calendar year so as to allow 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, including timely submission of the proposed budget to FERC for approval in accordance with FERC regulations.
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 description and explanation of NERC's proposed ERO program activities for the year; budget component justification based on statutory or other authorities; explanation of how each budgeted activity lends itself to the accomplishment of the statutory or other authorities; sufficiency of resources

provided for in the budget to carry out the ERO program responsibilities; explanation of the calculations and budget estimates; identification and explanation of changes in budget components from the previous year's budget; information on staffing and organization charts; and such other information as is required by FERC and other ERO governmental authorities having authority to approve the proposed budget.

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 proposed annual budget for carrying out its delegated authority functions as well as all other activities and funding to NERC in accordance with a schedule developed by NERC and the regional entities, which shall provide for the regional entity to submit its final budget that has been approved by its board of directors or other governing body no later than July 1 of the prior year, in order to provide sufficient time for NERC's review and comment on the proposed budget and approval of the regional entity budget by the NERC Board of Trustees in time for the NERC and regional budgets to be submitted to FERC and other ERO governmental authorities for approval in accordance with their regulations. The regional entity's budget shall include supporting materials in accordance with the budget and reporting format developed by NERC and the regional entities, 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.

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), and (3) 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 entities³ 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 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.

³ A regional entity may allocate funding obligations using an alternative method approved by NERC and by FERC and other appropriate ERO governmental authorities, as provided for in the regional delegation agreement.

7. NERC shall pursue any non-payments and shall request assistance from applicable governmental authorities as necessary to secure collection.
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.

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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 for an amended or supplemental budget for NERC or a regional entity and, if necessary under the amended or supplemental budget, to collect a special or additional assessment for statutory functions of NERC or the regional entity. Such filing shall include supporting materials to justify the requested funding, including any departure from the approved funding formula or method.

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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. Intentionally Left Blank

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NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Appendix 3A: Standard Processes Manual

Effective: September 3, 2010

to ensure
the reliability of the
bulk power system

116-390 Village Blvd., Princeton, NJ 08540
609.452.8060 | 609.452.9550 fax
www.nerc.com

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Introduction

Authority

This manual 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 manual with applicable governmental authorities for approval as an ERO document. When approved, the manual is appended to and provides implementation detail in support of the ERO Rules of Procedure Section 300 — Reliability Standards Development.

Scope

The policies and procedures in this manual shall govern the activities of the North American Electric Reliability Corporation (NERC) related to the development, approval, revision, reaffirmation, and withdrawal of standards, interpretations, definitions, variances, violation risk factors, violation severity levels, and reference documents developed to support standards for the reliable planning and operation of the North American bulk power systems.

Background

NERC is a nonprofit corporation formed for the purpose of becoming the North American ERO. 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. 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 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 ERO effective July 2006.

Essential Attributes of NERC's Standards Processes

NERC's standards development processes provide reasonable notice and opportunity for public comment, due process, openness, and balance of interests in developing a proposed Reliability Standard consistent with the attributes necessary for ANSI accreditation. The same attributes, as well as transparency, consensus-building, and timeliness, are also required under the ERO Rules of Procedure Section 304.

Open Participation

Participation in NERC's standards development balloting and approval processes shall be open to all entities materially affected by NERC's reliability standards. There shall be no financial barriers to participation in NERC's standards balloting and approval processes. Membership in the registered ballot body shall not be conditional upon membership in any organization, nor unreasonably restricted on the basis of technical qualifications or other such requirements.

Balance

NERC's standards development processes cannot be dominated by any two interest categories, individuals, or organizations and no single interest category, individual, or organization is able to defeat a matter.

NERC shall use a voting formula that allocates each industry segment an equal weight in determining the final outcome of any standard action. The standards development processes shall have a balance of interests. Participants from diverse interest categories shall be encouraged to join the Registered Ballot Body and participate in the balloting process, with a goal of achieving balance between the interest categories. The Registered Ballot Body serves as the consensus body voting to approve each new or proposed standard, definition, variance, and interpretation.

Coordination and harmonization with other American National Standards activities

NERC is committed to resolving any potential conflicts between its standards development efforts and existing American National Standards and candidate American National Standards.

Notification of standards development

NERC shall publicly distribute a notice to each member of the Registered Ballot Body, and to each stakeholder who indicates a desire to receive such notices, for each action to create, revise, reaffirm, or withdraw a standard, definition, or variance; and for each proposed interpretation. Notices shall be distributed electronically, with links to the relevant information, and notices shall be posted on NERC's standards web page. All notices shall identify a readily available source for further information.

Transparency

The process shall be transparent to the public.

Consideration of views and objections

Drafting teams shall give prompt consideration to the written views and objections of all participants, providing individualized written responses to those commenting during formal comment periods and those commenting as part of the balloting process. Drafting teams shall make an effort to resolve each objection that is related to the topic under review.

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.

Consensus vote

NERC shall use its voting process to determine if there is sufficient consensus to approve a proposed reliability standard, definition, variance, or interpretation. NERC shall form a ballot pool for each standard action from interested members of its registered ballot body. Approval of any standard action requires:

- 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; and
- A two-thirds majority of the weighted segment votes cast shall be affirmative. The number of votes cast is the sum of affirmative and negative votes, excluding abstentions and non-responses.

Timeliness

Development of standards shall be timely and responsive to new and changing priorities for reliability of the bulk power system.

Elements of a Reliability Standard

Definition of a Reliability Standard

A reliability standard includes a set of requirements that define specific obligations of owners, operators, and users of the North American bulk power systems. The requirements shall be material to reliability and measurable. 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 capacity¹.

Reliability Principles

NERC reliability standards are based on certain reliability principles that define the foundation of reliability for North American bulk power systems². 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 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 principles³. 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.

Types of Reliability Requirements

Generally, each requirement of a reliability standard shall identify, “What functional entity shall do what under what conditions to achieve what reliability objective.” Although reliability standards all follow this format several types of requirements may exist, each with a different approach to measurement.

- **Performance-based requirements** define a specific reliability objective or outcome that has a direct, observable effect on the reliability of the bulk power system, i.e. an effect that can be measured using power system data or trends.
- **Risk-based requirements** define actions of entities that reduce a stated risk to the reliability of the bulk power system and can be measured by evaluating a particular product or outcome resulting from the required actions.

¹ § 39.1 Code of Federal Regulations.

² The intent of the set of NERC reliability standards is to deliver an Adequate Level of Reliability. The latest set of Reliability Principles and the latest set of characteristics associated with an Adequate Level of Reliability are posted on the Reliability Standards Resources Web Page.

³ The latest set of Market Interface Principles is posted on the Reliability Standards Resources Web Page.

- **Capability-based requirements** define capabilities needed to perform reliability functions and can be measured by demonstrating that the capability exists as required.

The body of reliability requirements collectively provides a defense-in-depth strategy supporting reliability of the bulk power system.

Elements of a Reliability Standard

A reliability standard includes several components designed to work collectively to identify what entities must do to meet their reliability-related obligations as an owner, operator or user of the bulk power system. The components of a reliability standard include mandatory and enforceable sections and informational sections of the standard.

Mandatory and Enforceable Sections of a Standard:

Title: A brief, descriptive phrase identifying the topic of the standard.

Number: A unique identification number assigned in accordance with a published classification system to facilitate tracking and reference to the standards.

Purpose: The reliability outcome achieved through compliance with the requirements of the standard.

Effective Dates: Identification of when each requirement becomes effective in each jurisdiction.

Requirement: An explicit statement that identifies the functional entity responsible, the action or outcome that must be achieved, any conditions achieving the action or outcome, and the reliability-related benefit of the action or outcome. Each requirement shall be a statement for which compliance is mandatory.

Measure: Provides identification of the evidence or types of evidence needed to demonstrate compliance with the associated requirement. Each requirement shall have at least one measure. Each measure shall clearly refer to the requirement(s) to which it applies.

Evidence Retention: Identification, for each requirement in the standard, of the entity that is responsible for retaining evidence to demonstrate compliance, and the duration for retention of that evidence.

Variance: A requirement (to be applied in the place of the continent-wide requirement), and its associated measure and compliance information, that is applicable to a specific geographic area or to a specific set of functional entities.

Informational Sections of a Standard

Application Guidelines: Guidelines to support the implementation of the associated standard.

Procedures: Procedures to support implementation of the associated standard.

Time Horizon: The time period an entity has to mitigate an instance of violating the associated requirement.⁴

Compliance Enforcement Authority: The entity that is responsible for assessing performance or outcomes to determine if an entity is compliant with the associated standard.

⁴ The latest set of approved Time Horizon classifications is posted on the Reliability Standards Resources Web Page.

Compliance Monitoring and Assessment Processes: Identification of the processes that will be used to evaluate data or information for the purpose of assessing performance or outcomes with the associated standard.

Additional Compliance Information: Any other information related to assessing compliance such as the criteria or periodicity for filing specific reports.

Compliance Elements Associated with a Standard

Violation Risk Factors and Violation Severity Levels: Violation risk factors (VRFs) and violation severity levels (VSLs) are used as factors when determining the size of a penalty or sanction associated with the violation of a requirement in an approved reliability standard⁵. Each requirement in each reliability standard has an associated VRF and a set of VSLs. VRFs and VSLs are developed by the drafting team, working with NERC staff, at the same time as the associated reliability standard, but are not part of the reliability standard. The Board of Trustees is responsible for approving VRFs and VSLs.

Violation Risk Factors

VRFs identify the potential reliability significance of noncompliance with each requirement. Each requirement is assigned a VRF in accordance with the latest approved set of VRF criteria⁶.

Violation Severity Levels

VSLs define the degree to which compliance with a requirement was not achieved. Each requirement shall have at least one VSL. While it is preferable to have four VSLs for each requirement, some requirements do not have multiple “degrees” of noncompliant performance and may have only one, two, or three VSLs. Each requirement is assigned one or more VSLs in accordance with the latest approved set of VSL criteria⁷.

⁵ The *Sanction Guidelines of the North American Electric Reliability Corporation* identifies the factors used to determine a penalty or sanction for violation of reliability standard and is posted on the NERC Web Site.

⁶ The latest set of approved VRF Criteria is posted on the Reliability Standards Resources Web Page.

⁷ The latest set of approved VSL Criteria is posted on the Reliability Standards Resources Web Page.

Standards Program Organization

Board of Trustees

The NERC Board of Trustees shall consider for adoption reliability standards, definitions, variances and interpretations and associated implementation plans that have been processed according to the processes identified in this manual. In addition, the board shall consider for approval, VRFs and VSLs associated with each approved standard. Once the board adopts a reliability standard, definition, variance or interpretation, or once the board approves VRFs or VSLs, the board shall direct NERC staff to file the document(s) for approval with applicable governmental authorities.

Registered Ballot Body

The Registered Ballot Body comprises all entities or individuals that qualify for one of the stakeholder segments approved by the Board of Trustees⁸, and are registered with NERC as potential ballot participants in the voting on standards. Each member of the Registered Ballot Body is eligible to join the ballot pool for each standard action.

Ballot Pool

Each standard action has its own ballot pool formed of interested members of the Registered Ballot Body. The ballot pool comprises those members of the Registered Ballot Body that respond to a pre-ballot request to participate in that particular standard action. The ballot pool votes on each standards action. The ballot pool remains in place until all balloting related to that standard action has been completed.

Standards Committee

The Standards Committee serves at the pleasure and direction of the NERC Board of Trustees, and the board approves the Standards Committee's Charter.⁹ Standards Committee members are elected by their respective segment's stakeholders. The Standards Committee consists of two members of each of the stakeholder segments in the Registered Ballot Body¹⁰. A member of the standards staff shall serve as the nonvoting secretary to the Standards Committee.

The Standards Committee is responsible for managing the standards processes for development of standards, VRFs, VSLs, definitions, variances and interpretations in accordance with this manual. The responsibilities of the Standards Committee are defined in detail in the Standards Committee's Charter. The Standards Committee is responsible for ensuring that the standards, VRFs, VSLs, definitions, variances and interpretations developed by drafting teams are developed in accordance with the processes in this manual and meet NERC's benchmarks for reliability standards as well as criteria for governmental approval¹¹.

The Standards Committee has the right to remand work to a drafting team, to reject the work of a drafting team, or to accept the work of a drafting team. The Standards Committee may direct a drafting team to revise its work to follow the processes in this manual or to meet the criteria for NERC's benchmarks for

⁸ The Industry Segment Qualifications are described in the Development of the Registered Ballot Body and Segment Qualification Guidelines document posted on the Reliability Standards Resources Web Page.

⁹ The Standards Committee Charter is posted on the Reliability Standards Resources Web Page.

¹⁰ 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.

¹¹ The Ten Benchmarks of an Excellent Reliability Standard and FERC's Criteria for Approving Reliability Standards are posted on the Reliability Standards Resources Web Page.

reliability standards, or to meet the criteria for governmental approval however the Standards Committee shall not direct a drafting team to change the technical content of a draft standard.

The Standards Committee shall meet at regularly scheduled intervals (either in person, or by other means). All Standards Committee meetings are open to all interested parties.

Standards Staff

The standards staff, led by the Director of Standards, is responsible for administering NERC's reliability standards processes in accordance with this manual. The standards staff provides support to the Standards Committee in managing the standards processes and in supporting the work of all drafting teams. The standards staff works to ensure the integrity of the standards processes and consistency of quality and completeness of the reliability standards. The standards staff facilitates all steps in the development of standards, definitions, variances, interpretations and associated implementation plans. The standards staff works with drafting teams in developing VRFs and VSLs for each standard.

The standards staff is responsible for presenting standards, definitions, variances, and interpretations to the NERC Board of Trustees for adoption. When presenting standards-related documents to the NERC Board of Trustees for adoption or approval, the standards staff shall report the results of the associated stakeholder ballot, including identification of unresolved stakeholder objections and an assessment of the document's practicality and enforceability.

Drafting Teams

The Standards Committee shall appoint industry experts to drafting teams to work with stakeholders in developing and refining Standard Authorization Requests (SARs), standards, VRFs, VSLs, definitions, and variances. The standards staff shall appoint drafting teams that develop interpretations.

Each drafting team consists of a group of technical experts that work cooperatively with the support of the standards staff¹². The technical experts provide the subject matter expertise and guide the development of the technical aspects of the standard, assisted by technical writers. The technical experts maintain authority over the technical details of the standard. Each drafting team appointed to develop a standard is responsible for following the processes identified in this manual as well as procedures developed by the Standards Committee from the inception of the assigned project through the final acceptance of that project by applicable governmental authorities.

Collectively, each drafting team:

- Drafts proposed language for the reliability standards, definitions, variances, and/or interpretations and associated implementation plans.
- Solicits, considers, and responds to comments related to the specific standards development project.
- Participates in industry forums to help build consensus on the draft reliability standards, definitions, variances, and/or interpretations and associated implementation plans.
- Assists in developing the documentation used to obtain governmental approval of the reliability standards, definitions, variances, and/or interpretations and associated implementation plans.

All drafting teams report to the Standards Committee.

Governmental Authorities

¹² The detailed responsibilities of drafting teams are outlined in the Drafting Team Guidelines, which is posted on the Reliability Standards Resources Web Page.

The Federal Energy Regulatory Commission (FERC) in the United States of America, and where permissible by statute or regulation, the provincial government of each of the eight Canadian Provinces (Manitoba, Nova Scotia, Saskatchewan, Alberta, Ontario, British Columbia, New Brunswick and Quebec) and the Canadian National Energy Board have the authority to approve each new, revised or withdrawn reliability standard, definition, variance, interpretation, VRF, and VSL following adoption or approval by the NERC Board of Trustees.

Committees, Subcommittees, Working Groups, and Task Forces

NERC's technical committees, subcommittees, working groups, and task forces provide technical research and analysis used to justify the development of new standards and provide guidance, when requested by the Standards Committee, in overseeing field tests or collection and analysis of data. The technical committees, subcommittees, working groups, and task forces provide feedback to drafting teams during both informal and formal comment periods.

The technical committees, subcommittees, working groups, and task forces share their observations regarding the need for new or modified standards or requirements with the standards staff for use in identifying the need for new standards projects for the three-year *Reliability Standards Development Plan*.

Compliance and Certification Committee

The Compliance and Certification Committee is responsible for monitoring NERC's compliance with its reliability standards processes and procedures and for monitoring NERC's compliance with the Rules of Procedure regarding the development of new or revised standards, VRFs, VSLs, definitions, variances, and interpretations. The Compliance and Certification Committee assists in verifying that each proposed standard is enforceable as written before the standard is posted for formal stakeholder comment and balloting.

Compliance Enforcement Program

The NERC compliance enforcement program manages and enforces compliance with approved reliability standards. The compliance enforcement program shall provide feedback to drafting teams during the standards development process to ensure the compliance enforcement program can be practically implemented for the standards under development.

The compliance enforcement program may conduct field tests or data collection related to compliance elements of proposed standards and may provide assistance with field tests or data collection when requested. The compliance enforcement program shares its observations regarding the need for new or modified requirements with the standards staff for use in identifying the need for new standards projects.

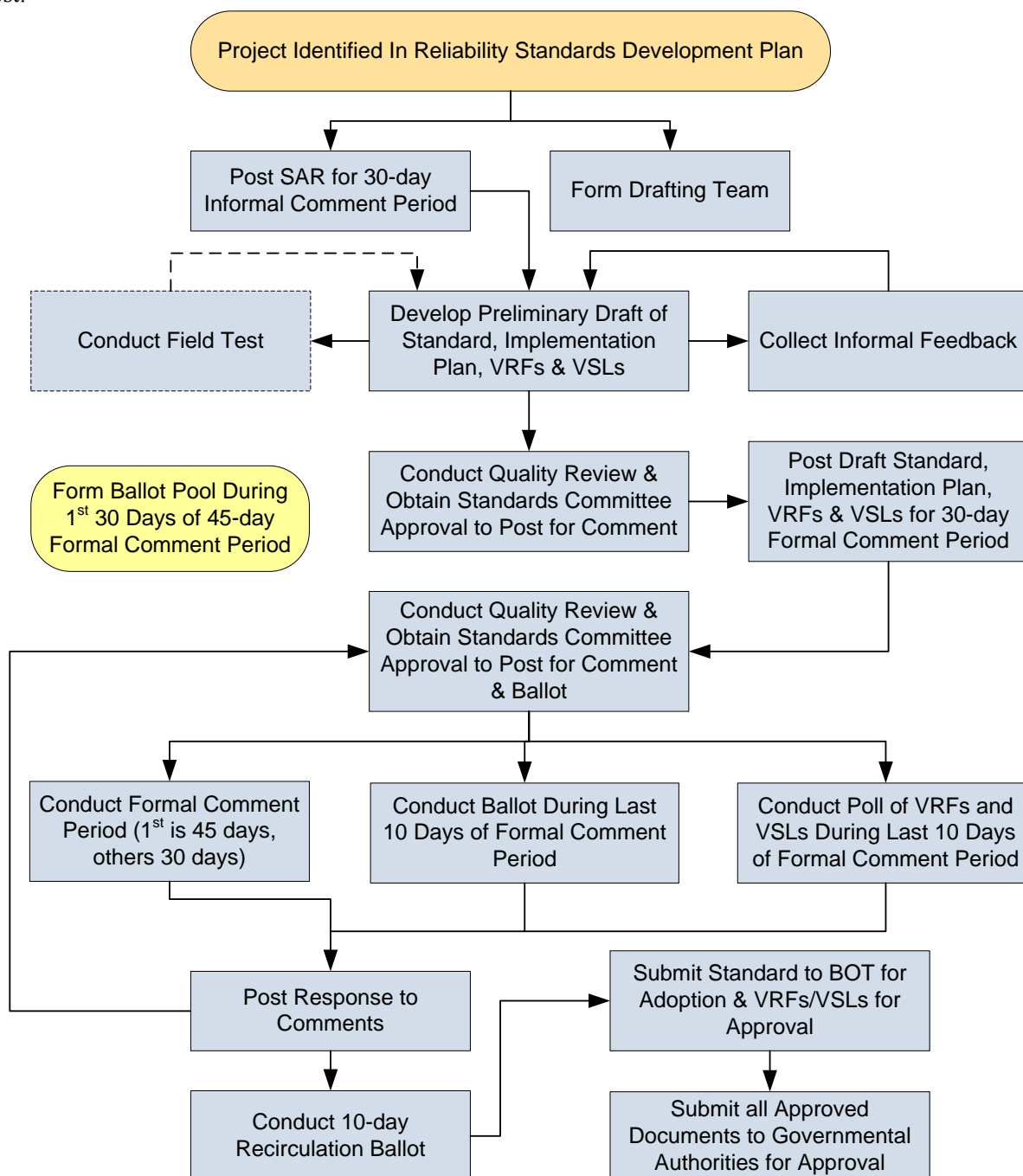
North American Energy Standards Board (NAESB)

While NERC has responsibility for developing standards to support reliability, NAESB has responsibility for developing business practices and coordination between reliability and business practices is needed. The NERC and NAESB developed and approved a procedure¹³ to guide the development of reliability standards and business practices where the reliability and business practice components are intricately entwined within a proposed standard.

¹³ The NERC NAESB Template Procedure for Joint Standards Development and Coordination is posted on the Reliability Standards Resources Web Page.

Process for Developing, Modifying, or Retiring a Standard

There are several steps to the development, modification or withdrawal of a reliability standard¹⁴. A typical process for a project identified in the *Reliability Standards Development Plan* that involves a revision to an existing standard is shown below. Note that most projects do not include a field test.



¹⁴ The process described is also applicable to projects used to propose a new or modified definition or variance or to propose retirement of a definition or variance.

Post and Collecting Information on SARs

Standard Authorization Request

A Standard Authorization Request (SAR) is the form used to document the scope and reliability benefit of a proposed project for one or more new or modified standards or the benefit of retiring one or more approved standards. Any entity or individual may propose the development of a new or modified standard, or may propose the retirement of a standard, by submitting a completed SAR¹⁵ to the standards staff.

Most new standards projects will have been identified in the latest approved *Reliability Standards Development Plan*¹⁶. The initial SAR for these projects shall be drafted by NERC staff and submitted to the Standards Committee with a request to post the SAR for stakeholder review. The Standards Committee has the authority to approve the posting of all SARs for projects that propose developing a new or modified standard or propose retirement of an existing standard.

The standards staff sponsors an open solicitation period each year seeking ideas for new standards projects (using *Reliability Standards Suggestions and Comments forms*). The open solicitation period is held in conjunction with the annual revision to the *Reliability Standards Development Plan*. While the Standards Committee prefers that ideas for new projects be submitted during this annual solicitation period through submittal of a *Reliability Standards Suggestions and Comments Form*¹⁷, a SAR proposing a specific project may be submitted to the standards staff at any time.

Each SAR that proposes a “new” standard, should be accompanied with a technical justification that includes, as a minimum, a discussion of the reliability-related impact of not developing the new standard, and a technical foundation document (e.g., research paper), when needed, to guide the development of the standard.

The standards staff shall review each SAR and work with the submitter to verify that all required information has been provided. All properly completed SARs shall be submitted to the Standards Committee for action at the next regularly scheduled Standards Committee meeting.

When presented with a SAR the Standards Committee shall determine if the SAR is sufficiently stated to guide standard development and whether the SAR is consistent with this manual. The Standards Committee shall take one of the following actions:

- Accept the SAR.
- Remand the SAR back to the standards staff for additional work.
- Reject the SAR. If the Standards Committee rejects a SAR, it shall provide a written explanation for rejection to the sponsor within ten days of the rejection decision.
- Delay action on the SAR pending development of a technical justification for the proposed project

If the Standards Committee remands, rejects, or delays action on a SAR, the sponsor may file an appeal following the appeals process provided in this manual.

If the Standards Committee is presented with a SAR that proposes developing a new standard but does

¹⁵ The SAR form can be downloaded from the Reliability Standards Resources Web Page.

¹⁶ The latest approved version of the *Reliability Standards Development Plan* is posted on the Reliability Standards Resources Web Page.

¹⁷ The *Reliability Standards Suggestions and Comments Form* can be downloaded from the Reliability Standards Resources Web Page.

not have a technical justification upon which the standard can be developed, the committee shall direct the standards staff to post the SAR for a 30-day comment period solely to collect stakeholder feedback on the scope of technical foundation, if any, needed to support the proposed project. If a technical foundation is determined to be necessary, the Standards Committee shall solicit assistance from NERC's technical committees or other industry experts in providing that foundation before authorizing development of the associated standard.

If the Standards Committee accepts a SAR, the project shall be added to the list of approved projects. The Standards Committee shall assign a priority to the project, relative to all other projects under development, and those projects already identified in the *Reliability Standards Development Plan* that are already approved for development. The Standards Committee shall work with the standards staff to coordinate the posting of SARs for new projects, giving consideration to each project's priority.

SAR Posting

When the Standards Committee determines it is ready to initiate a new project the Standards Committee shall direct staff to post the project's SAR in accordance with the following:

- For SARs that are limited to addressing regulatory directives, or revisions to standards that have had some vetting in the industry, authorize posting the SAR for a 30-day informal comment period with no requirement to provide a formal response to the comments received.
- For SARs that address the development of new projects or standards, authorize posting the SAR for a 30-day formal comment period.

If a SAR for a new standard is posted for a formal comment period, the Standards Committee shall appoint a drafting team to work with the staff coordinator in giving prompt consideration to the written views and objections of all participants. The Standards Committee may use a public nomination process to populate the standard drafting team, or may use another method that results in a team that collectively has the necessary technical expertise and work process skills to meet the objectives of the project. In some situations, an ad hoc team may already be in place with the requisite expertise, competencies, and diversity of views that are necessary to refine the SAR and develop the standard and additional members may not be needed. The drafting team shall respond to all comments submitted during the public posting period. 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. If the drafting team concludes that there isn't sufficient stakeholder support to continue to refine the SAR, the team may recommend that the Standards Committee direct curtailment of work on the SAR.

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 sponsor in writing of the rejection within ten days and the sponsor may initiate an appeal using the appeals procedure.

During the SAR comment process, the 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 shall be made a part of the draft new or revised standard.

If stakeholders indicate support for the project proposed with the SAR, the drafting team shall present its work to the Standards Committee with a request that the Standards Committee authorize development of the associated standard.

The Standards Committee, once again 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 sponsor and post that explanation.

If the Standards Committee rejects a SAR, the sponsor may initiate an appeal.

Form Drafting Team

When the Standards Committee is ready to have a drafting team begin work on developing a new or revised standard, the Standards Committee shall appoint a drafting team, if one was not already appointed to develop the SAR. If the Standards Committee appointed a drafting team to refine the SAR, the same drafting team shall work to develop the associated standard.

If no drafting team is in place, then the Standards Committee may use a public nomination process to populate the standard drafting team, or may use another method that results in a team that collectively has the necessary technical expertise and work process skills to meet the objectives of the project. In some situations, an ad hoc team may already be in place with the requisite expertise, competencies, and diversity of views that are necessary to develop the standard and additional members may not be needed.

The standards staff shall provide a member to support the team with technical writing expertise and shall provide administrative support to the team, guiding the team through the steps in completing its project. The individuals provided by the standards staff serve as advisors to the drafting team and do not have voting rights. In developing the standard, the drafting team members assigned by the Standards Committee shall have final authority over the technical details of the standard, while the technical writer shall provide assistance to the drafting team in assuring that the final draft of the standard meets the quality attributes identified in NERC's Benchmarks for Excellent Standards.

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 Standards Committee may decide a project is so large that it should be subdivided and either assigned to more than one drafting team or assigned to a single drafting team with clear direction on completing the project in specified phases. . If a SAR is subdivided and assigned to more than one drafting team, each drafting team will have a clearly defined portion of the work such that there are no overlaps and no gaps in the work to be accomplished.”

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.

Develop Preliminary Draft of Standard, Implementation Plan, VRFs and VSLs

Project Schedule

When a drafting team begins its work, either in refining a SAR or in developing or revising a proposed standard, the drafting team shall develop a project schedule and report progress, to the Standards Committee, against that schedule as requested by the Standards Committee.

Draft Standard

The team shall develop a standard that is within the scope of the associated SAR that includes all required elements as described earlier in this manual with a goal of meeting the quality attributes identified in NERC's Benchmarks for Excellent Standards and criteria for governmental approval. The team shall

document its justification for the requirements in its proposed standard by explaining how each meets these criteria.

Implementation Plan

As a drafting team drafts its proposed revisions to a reliability standard, that team is also required to develop an implementation plan to identify any factors for consideration when approving the proposed effective date or dates for the associated standard or standards. As a minimum, the implementation plan shall include the following:

- The proposed effective date (the date entities shall be compliant) for the requirements.
- Identification of any new or modified definitions that are proposed for approval with the associated standard.
- Whether there are any prerequisite actions that need to be accomplished before entities are held responsible for compliance with one or more of the requirements.
- Whether approval of the proposed standard will necessitate any conforming changes to any already approved standards – and identification of those standards and requirements.
- The functional entities that will be required to comply with one or more requirements in the proposed standard.

A single implementation plan may be used for more than one standard. The implementation plan is posted with the associated standard or standards during the 45-day formal comment period and is balloted with the associated standard.

Violation Risk Factors and Violation Severity Levels

The drafting team shall work with NERC staff in developing a set of VRFs and VSLs that meet the latest criteria established by NERC and governmental authorities. The drafting team shall document its justification for selecting each VRF and for setting each set of proposed VSLs by explaining how its proposed VRFs and VSLs meet these criteria. NERC staff is responsible for ensuring that the VRFs and VSLs proposed for stakeholder review meet these criteria.

Before the drafting team has finalized its standard, implementation plan, VRFs and VSLs, the team should seek stakeholder feedback on its preliminary draft documents.

Solicit Informal Feedback¹⁸

Drafting teams may use a variety of methods to collect stakeholder feedback on preliminary drafts of its documents, including the use of informal comment periods, webinars, industry meetings, workshops, or other mechanisms. Informal comment periods, if used, shall have a minimum duration of 30 days. Information gathered from informal comment forms shall be publicly posted and, while drafting teams are not required to provide a written response to each individual comment received, drafting teams must post a summary response that identifies how it used comments submitted by stakeholders. The intent is to gather stakeholder feedback on a “working document” before the document reaches the point where it is considered the “final draft.”

Conduct Quality Review

The standards staff shall coordinate a quality review¹⁹ of the “final draft” of the standard, implementation plan, VRFs and VSLs to assess whether the documents are within the scope of the associated SAR,

¹⁸ While this discussion focuses on collecting stakeholder feedback on proposed standards, implementation plans and VRFs and VSLs, the same process is used to collect stakeholder feedback on proposed new or modified definitions and variances.

whether the standard is clear and enforceable as written, and whether the standard meets the criteria specified in NERC's Benchmarks for Excellent Standards and criteria for governmental approval of standards, VRFs and VSLs. This review shall be completed within 30 days of receipt of the final version of the documents from the drafting team. The detailed results of this review shall be provided to the drafting team and the Standards Committee with a recommendation on whether the documents are ready for formal posting and balloting.

If the Standards Committee agrees that the proposed standard, implementation plan, VRFs or VSLs pass this review, the Standards Committee shall authorize posting the proposed standard, implementation plan, VRFs and VSLs for a formal comment period, ballot (for the standard and implementation plan), and non-binding poll (for VRFs and VSLs) as soon as the work flow will accommodate.

If the Standards Committee finds that any of the documents do not meet the specified criteria, the Standards Committee shall remand the documents to the drafting team for additional work.

If the standard is outside the scope of the associated SAR, the drafting team shall be directed to either revise the standard so that it is within the approved scope, or submit a request to expand the scope of the approved SAR. If the standard is not clear and enforceable as written, or if the standard or its VRFs or VSLs do not meet the specified criteria, the standard shall be returned to the drafting team with specific identification of any requirement that is deemed to be unclear or unenforceable as written.

Conduct Formal Comment Periods

Most proposed new or modified standards will require a minimum of two formal comment periods where the new or modified standard, its associated VRFs and VSLs, and implementation plan or the proposal to retire a standard and its associated VRFs, VSLs and implementation plan are posted. The Standards Committee has the authority to waive the initial 30-day formal comment period if the proposed revision to a standard is minor and not substantive.

The first formal comment period shall be at least 30-days long. If the drafting team makes substantive revisions to the standard following the initial formal comment period, then the standard shall undergo another quality review before it is posted for its second formal comment period. The second formal comment period shall have a 45-day duration and shall start after the drafting team has posted its consideration of stakeholder comments and any conforming changes to the associated standard.

Formation of the ballot pool and the initial ballot of the standard and the non-binding poll of the VRFs and VSLs take place during the second formal comment period. If additional formal comment periods are needed, they shall be at least 30-days in length and shall be conducted in parallel with successive ballots and if needed, successive non-binding polls of the VRFs and VSLs.

The intent of the formal comment periods is to solicit very specific feedback on the final draft of the standard, VRFs, VSLs, and implementation plan. If stakeholders disagree with some aspect of the proposed set of products, comments provided should suggest specific language that would make the product acceptable to the stakeholder.

The drafting team shall consider and respond to all comments submitted during the formal comment periods at the same time and in the same manner as specified for addressing comments submitted with ballots. NERC staff shall provide assistance in responding to comments on VRFs and VSLs.

¹⁹ The quality review will involve a representative from the Compliance and Certification Committee as well as others; but will not involve individuals who participated in the development of the standard.

All comments received and all responses shall be publicly posted. Stakeholders who submit comments objecting to some aspect of the documents posted for comment shall determine if the response provided by the drafting team satisfies the objection. All objectors shall be informed of the appeals process contained within this manual.

Form Ballot Pool

The standards staff shall establish a ballot pool during the first 30 days of the 45-day formal comment period. The standards staff shall post the proposed standard, its implementation plan, VRFs, and VSLs and shall send a notice to every entity in the Registered Ballot Body to provide notice that there is a new or revised standard proposed for approval and to solicit participants for the associated ballot pool. All members of the Registered Ballot Body are eligible to join each ballot pool to vote on a new or revised reliability standard and its implementation plan. Members who join the ballot pool to vote on the new or revised standard and its implementation plan are automatically entered into the ballot pool to participate in the non-binding poll of the associated VRFs and VSLs.

Any member of the Registered Ballot Body may join or withdraw from the ballot pool until the ballot window opens. No Registered Ballot Body member may join or withdraw from the ballot pool once the first ballot starts through the point in time where balloting for that standard action has ended. The Director of Standards may authorize deviations from this rule for extraordinary circumstances such as the death, retirement, or disability of a ballot pool member that would prevent an entity that had a member in the ballot pool from eligibility to cast a vote during the ballot window. Any approved deviation shall be documented and noted to the Standards Committee.

Conduct Initial Ballot and Conduct Non-binding Poll

The standards staff shall announce the opening of the initial ballot window and the non-binding poll of VRFs and VSLs. The ballot window and non-binding poll window shall both take place during the last 10 days of the 45-day formal comment period. This allows all stakeholders the opportunity to comment on the final draft of each proposed standard, even those stakeholders who are not members of the ballot pool.

The ballot and non-binding poll shall be conducted electronically. The voting and polling windows shall each be a period of 10 calendar days but both shall be extended, if needed, until a quorum is achieved. During a ballot window, NERC shall not sponsor or facilitate public discussion of the standard action under ballot.

Consider and Respond to Stakeholder and Balloter Comments

The drafting team shall consider every stakeholder comment submitted either in response to a formal comment period or submitted with a ballot that includes a proposal for a specific modification to the standard or its implementation plan posted for comment and approval. The drafting team shall provide a response to each of these proposals indicating whether the drafting team adopted the recommendation, in accordance with the following:

If a Comment:	Then	And
Is unrelated to proposed standard action	Note that comment is unrelated	No further action needed
Proposes change that expands project scope	Note that comment is proposing an expansion	Add item to “issues database” for consideration during next update to the standard
Proposes a modification based on a technical issue not previously identified	Provide the drafting team’s technical analysis of the proposal	If the team accepts the proposal, modify the standard
Proposed a modification based on a technical issue previously vetted	Provide a summary of the vetting and resolution previously reached	No further action needed
Proposes a modification to provide greater clarity	Provide the drafting team’s view as to whether the proposed modification improves clarity	If the team accepts the proposal, modify the standard

If stakeholders submit comments that indicate a specific improvement to one or more of the VRFs or VSLs would improve consensus without violating the criteria for setting VRFs and VSLs, then the drafting team, working with NERC staff, shall consider and respond to each comment, and shall make conforming changes to reflect those comments. There is no requirement to conduct a new non-binding poll of the revised VRFs and VSLs if no changes were made to the associated standard, however if the requirements are modified and conforming changes are made to the associated VRFs and VSLs, another non-binding poll of the revised VRFs and VSLs shall be conducted.

All comments submitted and the responses to those comments shall be publicly posted.

Criteria for Ballot Pool Approval

Ballot pool approval of a reliability standard requires:

- 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; and
- A two-thirds majority of the weighted segment votes cast shall be affirmative. The number of votes cast is the sum of affirmative and negative votes, excluding abstentions and non-responses.

The following process²⁰ is used to determine if there are sufficient affirmative votes.

- For each segment with ten or more voters, the following process shall be used: The number of affirmative votes cast shall be divided by the sum of affirmative and negative votes cast to determine the fractional affirmative vote for that segment. Abstentions and non-responses shall not be counted for the purposes of determining the fractional affirmative vote for a segment.

²⁰ Examples of Weighted Segment Voting Calculation are posted on the Reliability Standards Resources Web Page.

- For each segment with less than ten voters, 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.
- The sum of the fractional affirmative votes from all segments divided by the number of segments voting²¹ shall be used to determine if a two-thirds majority has been achieved. (A segment shall be considered as “voting” if any member of the segment in the ballot pool casts either an affirmative or a negative vote.)
- A standard shall be approved if the sum of fractional affirmative votes from all segments divided by the number of voting segments is at least two thirds.

Each member of the ballot pool may vote one of the following positions:

- Affirmative
- Affirmative, with comment
- Negative without comment
- Negative with comments (if possible reasons should include specific wording or actions that would resolve the objection)
- Abstain

Each ballot pool member submitting a negative vote with comments shall determine if the response provided by the drafting team satisfies those stated concerns. Each such balloter shall be informed of the appeals process contained within this manual.

If a standard achieves a quorum and there are no negative votes with comments from the initial ballot, and the overall approval is at least two thirds (weighted by segment) then the results of the initial ballot shall stand as final and the draft reliability standard and associated implementation plan shall be deemed to be approved by its ballot pool.

Successive Ballots (Standard has Changed Substantively from Prior Ballot)

If a stakeholder or balloter proposes a significant revision to the standard during the formal comment period or concurrent initial ballot that will improve the quality, clarity, or enforceability of that standard then the drafting team shall make such revisions and post the revised standard for another public comment period and ballot. If the previous ballot achieved a quorum and sufficient affirmative ballots for approval, the comment period shall be 30 days and the new ballot may focus on the entire standard and its implementation plan or may focus only on the element(s) that were changed following the previous ballot.

The drafting team shall address comments submitted during successive ballot periods (comments submitted from stakeholders during the open formal comment period and comments submitted with negative ballots) in the same manner as for the initial ballot. Once the drafting team has a draft standard that has been through a “successive ballot” and the team believes that no additional significant modifications are needed, the standard shall be posted for a Recirculation Ballot.

Conduct Recirculation (Final) Ballot

(Standard has not Changed Substantively from Prior Ballot)

When the drafting team has reached a point where it has made a good faith effort at resolving applicable objections, the team shall conduct a recirculation ballot. In the recirculation ballot, members of the ballot pool shall again be presented the proposed standard (that has not been significantly changed from the

²¹ 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.

previous ballot) along with the reasons for negative votes, the responses, and any resolution of the differences. An insignificant revision is a revision that does not change the scope, applicability, or intent of any requirement and includes but is not limited to things such as correcting the numbering of a requirement, correcting the spelling of a word, adding an obviously missing word, or rephrasing a requirement for improved clarity. Where there is a question as to whether a proposed modification is “substantive” the Standards Committee shall make the final determination. There is no formal comment period concurrent with the recirculation ballot and no obligation for the drafting team to respond to any comments submitted during the recirculation ballot.

All members of the ballot pool shall be permitted to reconsider and change their vote from the prior ballot. Members of the ballot pool who did not respond to the prior ballot shall be permitted to vote in the recirculation ballot. In the recirculation ballot, votes shall be counted by exception only — members on the recirculation ballot may indicate a revision to their original vote otherwise their vote shall remain the same as in their prior ballot.

Final Ballot Results

There are no limits to the number of “successive” public comment periods and ballots that can be conducted to result in a standard or interpretation that is clear and enforceable, and achieves a quorum and sufficient affirmative votes for approval. The Standards Committee has the authority to conclude this process or a particular standards action if it becomes obvious that the drafting team cannot develop a standard that is within the scope of the associated SAR, is sufficiently clear to be enforceable, and achieves the requisite weighted segment approval percentage.

The standards staff shall post the final outcome of the ballot process. If the standard is rejected, the process is ended and any further work on the items within the SAR’s original scope shall require a new SAR. If the standard is approved, the consensus standard shall be posted and presented to the Board of Trustees for adoption by NERC.

Board of Trustee Adoption of Standards and Implementation Plans

A reliability standard and its implementation plan submitted for adoption by the Board of Trustees shall be provided to the NERC Board of Trustees at the same time it is posted for the ballot pool’s pre-ballot review. If the standard and implementation plan are approved by their ballot pool, the Board of Trustees shall consider adoption of that reliability standard and its associated implementation plan. In making its decision, the board shall consider the results of the balloting and unresolved dissenting opinions. The board shall adopt or reject a standard and its implementation plan, but shall not modify a proposed reliability standard. If the board chooses not to adopt a standard, it shall provide its reasons for not doing so.

Board of Trustee Approval of Violation Risk Factors and Violation Severity Levels

The board shall consider approval of the VRFs and VSLs associated with a reliability standard. In making its determination, the board shall consider the following:

- The Standards Committee shall present the results of the non-binding poll conducted and a summary of industry comments received on the final posting of the proposed VRFs and VSLs.
- NERC staff shall present a set of recommended VRFs and VSLs that considers the views of the standard drafting team, stakeholder comments received on the draft VRFs and VSLs during the posting for comment process, the non-binding poll results, appropriate governmental agency rules and directives, and VRF and VSL assignments for other Reliability Standards to ensure consistency and relevance across the entire spectrum of Reliability Standards.

Governmental Approvals

If the board approves a reliability standard and its implementation plan and the associated VRFs and VSLs, the board shall direct NERC staff to file the standard, its implementation plan and its associated VRFs and VSLs, with applicable governmental authorities in the United States, Canada, and Mexico for approval.

Compliance

For a standard to be enforceable, it shall be approved by its ballot pool, adopted by the NERC Board of Trustees, and then approved by applicable governmental authorities. Once a reliability standard is approved or otherwise made mandatory by applicable governmental authorities in the United States, Canada, and Mexico, all persons and organizations subject to the reliability jurisdiction are required to comply with the standard in accordance with applicable statutes, regulations, and agreements.

Process for Developing a Defined Term

NERC maintains a glossary of approved terms, entitled the “*Glossary of Terms Used in Reliability Standards*.”²² The glossary includes terms that have been through the formal approval process and are used in one or more NERC reliability standards. Definitions shall not contain statements of performance requirements. There are two sections to the glossary. The first section includes definitions for terms used in continent-wide standards, and the second section includes definitions for terms used in Regional Entity standards that have been adopted by the NERC Board of Trustees. The Glossary of Terms is intended to provide consistency throughout the Reliability Standards.

There are several methods that can be used to add, modify or retire a defined term used in a continent-wide standard.

- Anyone can use a Standard Authorization Request (SAR) to submit a request to add, modify, or retire a defined term.
- Anyone can submit a Standards Comments and Suggestions Form recommending the addition, modification, or retirement of a defined term. (The suggestion would be added to a project and incorporated into a SAR.)
- A drafting team may propose to add, modify, or retire a defined term in conjunction with the work it is already performing.

Proposals to Develop a New or Revised Definition

The following considerations should be made when considering proposals for new or revised definitions:

- Some NERC Regional Entities have defined terms that have been approved for use in Regional Reliability Standards, and where the drafting team agrees with a term already defined by a Region, the same definition should be adopted if needed to support a NERC standard.
- If a term is used in a reliability standard according to its common meaning (as found in a collegiate dictionary), the term shall not be proposed for addition to the NERC *Glossary of Terms Used in Reliability Standards*.
- If a term has already been defined, any proposal to modify or delete that term shall consider all uses of the definition in approved standards, with a goal of determining whether the proposed modification is acceptable, and whether the proposed modification would change the scope or intent of any approved standards.
- When practical, where The North American Energy Standards Board (NAESB) has a definition for a term, the drafting team shall use the same definition to support a NERC standard.

Any definition that is balloted separately from a proposed new or modified standard or from a proposal for retirement of a standard shall be accompanied by an implementation plan.

If a SAR is submitted to the standards staff with a proposal for a new or revised definition, the Standards Committee shall consider the urgency of developing the new or revised definition and may direct staff to post the SAR immediately, or may defer posting the SAR until a later time based on its priority relative to other projects already underway or already approved for future development. If the SAR identifies a term that is used in a standard already under revision by a drafting team, the Standards Committee may direct

²² The latest approved version of the glossary is posted on the Standards Web Page.

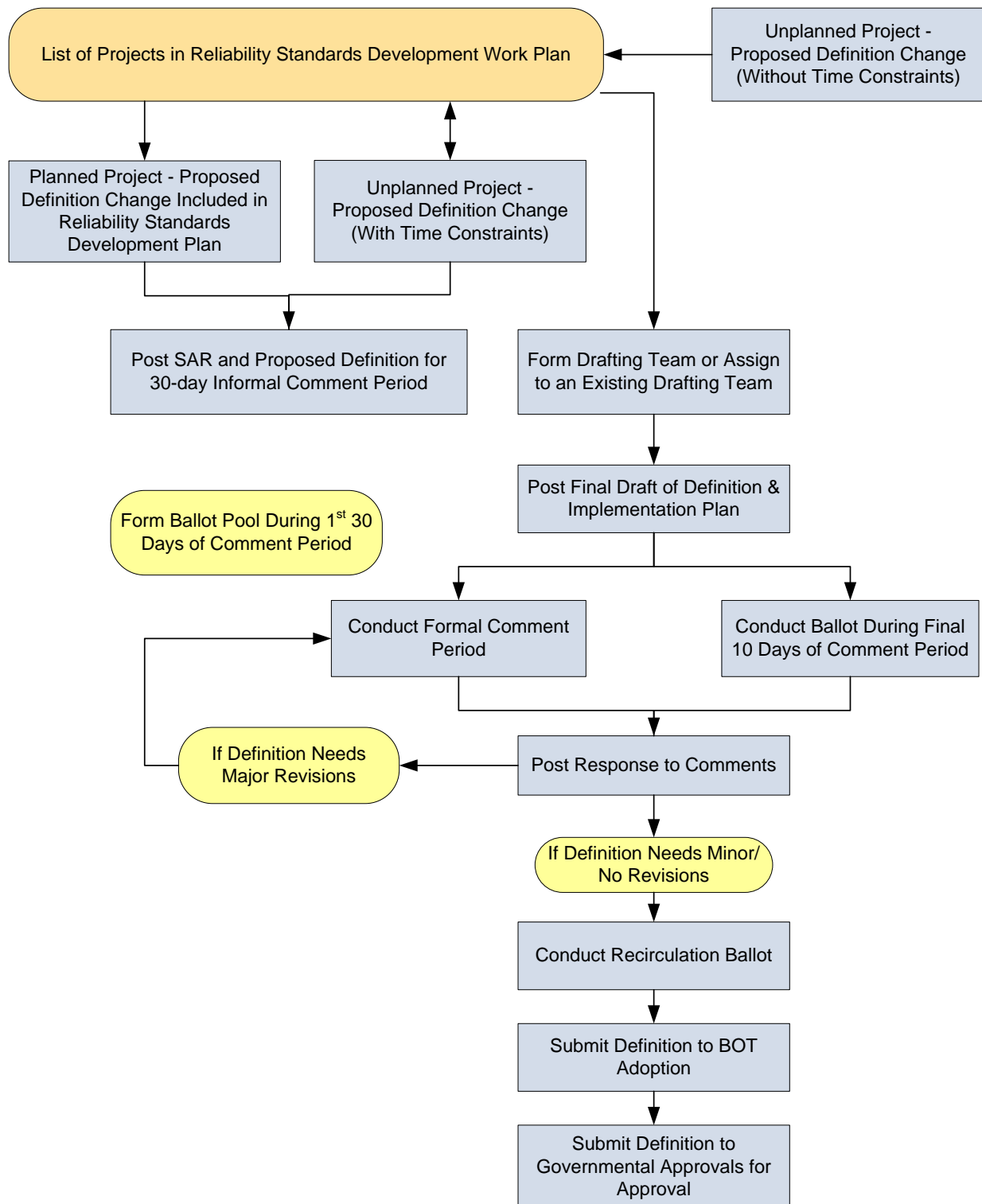
the drafting team to add the term to the scope of the existing project. Each time the Standards Committee accepts a SAR for a project that was not identified in the *Reliability Standards Development Plan* the project shall be added to the list of approved projects.

Stakeholder Comments and Approvals

Any proposal for a new or revised definition shall be processed in the same manner as a standard. The drafting team shall submit its work for a quality review and the Standards Committee and drafting team shall consider that review when determining whether the definition and its implementation plan are ready for formal comment and balloting. Once authorized by the Standards Committee, the proposed definition and its implementation plan shall be posted for at least one 45-day formal stakeholder comment period and shall be balloted in the same manner as a standard. If a new or revised definition is proposed by a drafting team, that definition may be balloted separately from the associated standard.

Each definition that is approved by its ballot pool shall be submitted to the NERC Board of Trustees for adoption and then filed with applicable governmental authorities for approval in the same manner as a standard.

Process for Developing a New or Revised Definition Initiated with a SAR



Processes for Conducting Field Tests and Collecting and Analyzing Data

While most drafting teams can develop their standards without the need to conduct any field tests and without the need to collect and analyze data, some standard development efforts may involve field tests analysis of data to validate concepts, requirements or compliance elements of standards.

There are three types of field tests – tests of concepts; tests of requirements; and tests of compliance elements.

Field Tests and Data Analysis for Validation of Concepts

Field tests or collection and analysis of data to validate concepts that support the development of requirements should be conducted before the SAR for a project is finalized. If an entity wants to test a technical concept in support of a proposal for a new or revised reliability standard, the entity should either work with one of NERC's technical committees in collecting and analyzing the data or in conducting the field test, or the entity should submit a SAR with a request to collect and analyze data or conduct a field test to validate the concept prior to developing a new or revised standard. The request to collect and analyze data or conduct a field test should include, at a minimum, either the data collection and analysis or field test plan, the implementation schedule, and an expectation for periodic updates of the analysis of the results. If the SAR sponsor has not collected and analyzed the data or conducted the field test, the Standards Committee may solicit support from NERC's technical committees or others in the industry. The results of the data collection and analysis or field test shall then be used to determine whether to add the SAR to the list of projects in the Reliability Standard Development Plan.

If a drafting team finds that it needs to collect and analyze data or conduct a field test of a concept that was not identified when the SAR was accepted, then the Standards Committee may direct the team to withdraw the SAR until the data has been collected and analyzed or until the field test has been conducted and the industry has had an opportunity to review the results for the impact on the scope of the proposed project.

Field Tests and Data Analysis for Validation of Requirements

If a drafting team wants to conduct a field test or collect and analyze data to validate its proposed requirements, measures, or compliance elements in a reliability standard, the team shall first obtain approval from the Standards Committee²³. Drafting teams are not required to collect and analyze data or to conduct a field test to validate a standard.

The request should include at a minimum the data collection and analysis or field test plan, the implementation schedule, and an expectation for periodic updates of the results. When authorizing a drafting team to collect and analyze data or to conduct a field test of one or more requirements, the Standards Committee may request inputs on technical matters related from NERC's technical committees or industry experts, and may request the assistance of the compliance organization. All data collection and analysis and all field tests shall be concluded and the results incorporated into the standard requirements as necessary before proceeding to the formal comment period and subsequent balloting.

Field Tests and Data Analysis for Validation of Compliance Elements

²³ The Process for Approving Data Collection and Analysis and Field Tests Associated with a Reliability Standard is posted on the Reliability Standards Resources Web Page.

If the Compliance Monitoring and Enforcement Program identifies a need to collect and analyze data or conduct a field test of one or more of the compliance elements of a proposed standard, then the Compliance Monitoring and Enforcement Program shall request the Standards Committee's approval. The request should include at a minimum the data collection and analysis or field test plan, the implementation schedule, and an expectation for periodic updates of the results.

When authorizing a drafting team to collect and analyze data or to conduct a field test of one or more compliance elements of a standard, the Standards Committee shall request the assistance of the Compliance Monitoring and Enforcement Program in conducting the field test.

Communication and Coordination for All Types of Field Tests and Data Analyses

If the conduct of a field test (concepts, requirements or compliance elements) or data collection and analysis could render Registered Entities incapable of complying with the current requirements of an approved standard that is undergoing revision, the drafting team shall request a temporary waiver from compliance to those requirements for entities participating in the field test. Upon request, the Standards Committee shall seek approval for the waiver from the Compliance Monitoring and Enforcement Program prior to the approval of the field test or data collection and analysis.

Once a plan for a field test or a plan for data collection and analysis is approved, the standards staff shall, under the direction of the Standards Committee, coordinate the implementation of the field test or data collection and analysis and shall provide official notice to the participants in the field test or data collection of any applicable temporary waiver to compliance with specific noted requirements. The drafting team conducting the field test shall provide periodic updates on the progress of the field tests or data collection and analysis to the Standards Committee. The Standards Committee has the right to curtail a field test or data collection and analysis that is not implemented in accordance with the approved plan.

The field test plan or data collection and analysis plan, its approval, its participants, and all reports and results shall be publicly posted for stakeholder review on the Standards Web Page.

If a drafting team conducts or participates in a field test or in data collection and analysis (of concepts, requirements or compliance elements), it shall provide a final report that identifies the results and how those results will be used.

Process for Developing an Interpretation

A valid interpretation request is one that requests additional clarity about one or more requirements in approved NERC reliability standards, but does not request approval as to how to comply with one or more requirements. A valid interpretation response provides additional clarity about one or more requirements, but does not expand on any requirement and does not explain how to comply with any requirement. Any entity that is directly and materially affected by the reliability of the North American bulk power systems may request an interpretation of any requirement in any continent-wide standard that has been adopted by the NERC Board of Trustees.

The entity requesting the interpretation shall submit a *Request for Interpretation* form²⁴ to the standards staff explaining the clarification required, the specific circumstances surrounding the request, and the impact of not having the interpretation provided.

The standards staff shall form a ballot pool and assemble an interpretation drafting team with the relevant expertise to address the clarification. As soon as practical the team shall develop a “final draft” interpretation providing the requested clarity.

The standards staff shall coordinate a quality review²⁵ of the interpretation to assess whether the interpretation is clear and provides the requested clarity without expanding on any requirement. The detailed results of this review shall be provided to the drafting team and the Standards Committee with a recommendation on whether the documents are ready for formal posting and balloting and if the Standards Committee agrees that the proposed interpretation passes this review, the Standards Committee shall authorize posting the proposed interpretation.

The first formal comment period shall be 30-days long. If the drafting team makes substantive revisions to the interpretation following the initial formal comment period, then the interpretation shall undergo another quality review before it is posted for its second formal comment period. The second formal comment period shall have a 45-day duration and shall start after the drafting team has posted its consideration of stakeholder comments and any conforming changes to the associated standard. Formation of a ballot pool shall take place during the first 30 days of the 45-day formal comment period, and the initial ballot of the interpretation shall take place during the last 10 days of that formal comment period. The interpretation drafting team shall consider and respond to all comments submitted during the formal comment period at the same time and in the same manner as specified for addressing comments submitted with ballots.

All comments received and all responses shall be publicly posted. Stakeholders who submit comments objecting to some aspect of the interpretation shall determine if the response provided by the drafting team satisfies the objection. All objectors shall be informed of the appeals process contained within this manual.

- If the ballot achieves a quorum and a 2/3 weighted segment approval, and there are no negative ballots with comments the ballot results are final.
- If stakeholder comments indicate the need for minor revisions, the interpretation drafting team shall make those revisions and post the interpretation for a 10-day recirculation ballot. (A minor revision is a revision that includes but is not limited to things such as correcting the spelling of a word, adding an obviously missing word, or rephrasing a sentence for improved

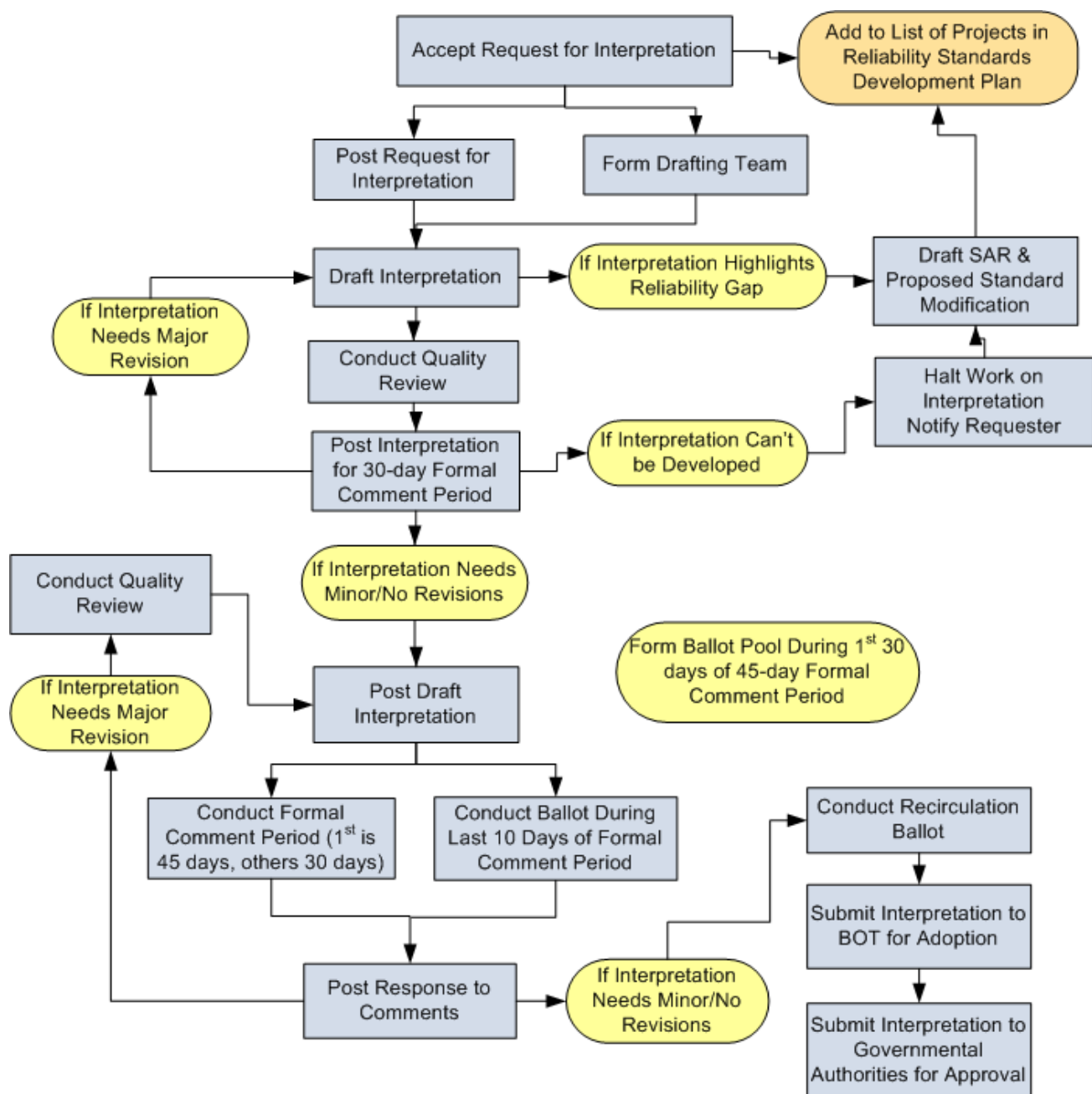
²⁴ The Request for Interpretation Form is posted on the NERC Standards Web Page.

²⁵ The quality review will involve a representative from the Compliance and Certification Committee as well as others; but will not involve individuals who participated in the development of the interpretation.

- clarity without changing the scope of what was previously written.) If stakeholder comments indicate that there is not consensus for the interpretation or if stakeholders propose significant modifications that would improve the interpretation and the interpretation drafting team can revise the interpretation without violating the basic expectations outlined above, the interpretation drafting team shall post the comments received and a revised interpretation for a 30-day comment period and balloting during the last 10-days of that comment period. If the ballot achieves a quorum and a 2/3 weighted segment approval, and additional modifications to the interpretation are not necessary (based on a review of the comments submitted with the ballot) the interpretation shall proceed to a recirculation ballot.
- If stakeholder comments indicate that there is not consensus for the interpretation, and the interpretation drafting team cannot revise the interpretation without violating the basic expectations outlined above, the interpretation drafting team shall notify the Standards Committee of its conclusion and shall submit a SAR with the proposed modification to the standard. The entity that requested the interpretation shall be notified and the disposition of the interpretation shall be posted.
 - If, during its deliberations, the interpretation drafting team identifies a reliability gap in the standard that is highlighted by the interpretation request, the interpretation drafting team shall notify the Standards Committee of its conclusion and shall submit a SAR with the proposed modification to the standard at the same time it provides its proposed interpretation, recommending use of the expedited standards development process as appropriate to address any significant reliability gap.

If approved by its ballot pool, the interpretation shall be appended to the standard and forwarded to the NERC Board of Trustees for adoption. If an interpretation drafting team proposes a modification to a standard as part of its work in developing an interpretation, the Board of Trustees shall be notified of this proposal at the time the interpretation is submitted for adoption. Following adoption by the Board of Trustees, NERC staff shall file the interpretation for approval by governmental authorities and the interpretation shall become effective when approved by those governmental authorities. The interpretation shall stand until such time as the interpretation can be incorporated into a future revision of the standard or the interpretation is retired due to a future modification of the applicable requirement.

Processing a Request for an Interpretation



Process for Appealing an Action or Inaction

Any entity that has directly and materially affected interests and that has been or will be adversely affected by any procedural action or inaction related to the development, approval, revision, reaffirmation, or withdrawal of a reliability standard, definition, variance, associated implementation plan, or interpretation shall have the right to appeal. This appeals process applies only to the NERC reliability standards processes as defined in this manual, not to the technical content of the standards action.

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.

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 shall submit (to the Director of Standards) a complaint in writing that describes the procedural action or inaction associated with the standards process. The appellant shall describe in the complaint the actual or potential adverse impact to the appellant. Assisted by staff and industry resources as needed, the Director of Standards 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 shall 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 Director of Standards, the Director of Standards shall convene a Level 2 Appeals Panel. This panel shall consist of five members 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 staff 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 entity that is directly and materially affected by the 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, definition, variance or interpretation or implementation plan as these responsibilities remain with the ballot pool and Board of Trustees respectively. The actions of the Level 2 Appeals Panel shall be publicly posted.

In addition to the foregoing, a procedural objection that has not been resolved may be submitted to the Board of Trustees for consideration at the time the board decides whether to adopt a particular reliability standard, definition, variance or interpretation. The objection shall 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 shall be filed no later than 30 days after the announcement of the vote by the ballot pool on the reliability standard in question.

Process for Developing a Variance

A variance is an approved, alternative method of achieving the reliability intent of one or more requirements in a standard. No regional entity or bulk power system owner, operator, or user shall claim a variance from a NERC reliability standard without approval of such a variance through the relevant standard approval procedure for the variance. Each variance from a NERC reliability standard that is approved by NERC and applicable governmental authorities shall be made an enforceable part of the associated NERC reliability standard.

NERC's drafting teams shall aim to develop standards with requirements that apply on a continent-wide basis, minimizing the need for variances while still achieving the standard's reliability objectives. If one or more requirements cannot be met or complied with as written because of a physical difference in the bulk power system or because of an operational difference (such as a conflict with a Federally or Provincially approved tariff), but the requirement's reliability objective can be achieved in a different fashion, an entity or a group of entities may pursue a variance from one or more requirements in a continent-wide standard. It is the responsibility of the entity that needs a variance to identify that need and initiate the processing of that variance through the submittal of a SAR²⁶ that includes a clear definition of the basis for the variance.

There are two types of variances – those that apply on an interconnection-wide basis, and those that apply to one or more entities on less than an interconnection-wide basis.

Interconnection-wide Variances

Any variance from a NERC reliability standard requirement that is proposed to apply to responsible entities within a regional entity organized on an interconnection-wide basis shall be considered an Interconnection-wide Variance and shall be developed through that regional entity's NERC-approved regional reliability standards development procedure.

While an interconnection-wide variance may be developed through the associated Regional Entity standards development process, regional entities are encouraged to work collaboratively with existing continent-wide drafting team to reduce potential conflicts between the two efforts.

An Interconnection-wide 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 associated NERC reliability standard. NERC shall rebuttably presume that an Interconnection-wide Variance from a NERC reliability standard that is developed, in accordance with a standards development 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 that Apply on Less than an Interconnection-wide Basis

Any variance from a NERC reliability standard requirement that is proposed to apply to one or more entities but less than an entire Interconnection (e.g., 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 considered a Variance. A Variance may be requested while a standard is under development or a Variance may be requested at any time after a standard is approved. Each request for a Variance shall be initiated through a SAR, and processed and approved in the same manner as a continent-wide standard, using the standards development process defined in this manual.

²⁶ A sample of a SAR that identifies the need for a Variance and a sample Variance are posted as resources on the Reliability Standards Resources Web Page.

Expedited Standards Development Process

NERC may need to develop a new or modified standard, VRFs, VSLs, definition, variance, or implementation plan²⁷ under specific time constraints (such as to meet a time constrained regulatory directive) or to meet an urgent reliability issue such that there isn't sufficient time to follow all the steps in the normal standards development process. Under those conditions, the Standards Committee shall have the authority to approve any of the following actions to expedite development:

- Shorten the 45-day formal comment period
- Shorten the 30-day period for forming the ballot pool
- Allow significant modifications following the initial ballot without the need for another formal comment period provided the modifications are highlighted before conducting any successive ballot
- Shorten any of the 10-day ballot windows

If a new or modified standard is developed, approved by its ballot pool, and subsequently adopted by the NERC Board of Trustees through this expedited process, one of the following three actions shall occur²⁸:

- If the standard is to be made permanent without additional substantive changes, then a SAR and a proposed standard shall be submitted to the standards staff immediately after the ballot. The project shall be added to the list of approved projects and shall proceed through the regular standard development process, including balloting by stakeholders, without any intentional delay.
- If the standard is to be substantively revised or replaced by a new standard, then a project for the new or revised standard shall be added to the list of projects to be added to the Reliability Standard Development Plan. The project shall be initiated as soon as practical after the ballot and the project shall proceed through the regular standard development process, including balloting by stakeholders, as soon as practical but within two years of the date the standard was approved by stakeholders using the expedited process.
- The standard shall be withdrawn through a ballot of the stakeholders within two years of the date the standard was approved by stakeholders using the expedited process.

²⁷ For the remainder of the description of the expedited standards development process, where the word, "standard" is used, the same process can be applied to a definition, variance, or implementation plan.

²⁸ Abbreviating the final formal comment period or a ballot window violate ANSI's accreditation requirements. The three actions that may be taken to fully process the expedited standard are intended to demonstrate NERC's commitment to meet ANSI's accreditation requirements.

Processes for Developing a Standard Related to a Confidential Issue

While it is NERC's intent to use its ANSI-accredited standards development process for developing its reliability standards, NERC has an obligation as the ERO to ensure that there are reliability standards in place to preserve the reliability of the interconnected bulk power systems throughout North America. When faced with a national security emergency situation, NERC may use one of the following special processes to develop a standard that addresses an issue that is confidential. Standards developed using one of the following processes shall be called, "special standards" and shall not be filed with ANSI for approval as ANSI standards.

The NERC Board of Trustees may direct the development of a new or revised reliability standard to address a national security situation that involves confidential issues. These situations may involve imminent or long-term threats. In general, these board directives will be driven by information from the President of the United States of America or the Prime Minister of Canada or a national security agency or national intelligence agency of either or both governments indicating (to the ERO) that there is a national security threat to the reliability of the bulk power system²⁹.

There are two special processes for developing standards responsive to confidential issues – one process where the confidential issue is "imminent", and one process where the confidential issue is "not imminent."

Process for Developing Standards Responsive to Imminent, Confidential Issues

If the NERC Board of Trustees directs the immediate development of a new or revised reliability standard to address a confidential national security emergency situation, the standards staff shall develop a SAR, form a ballot pool (to vote on the standard and its implementation plan and to participate in the non-binding poll of VRFs and VSLs) and assemble a slate of pre-defined subject matter experts as a proposed drafting team for approval by the Standards Committee's Officers. All members of the Registered Ballot Body shall have the opportunity to join the ballot pool.

Drafting Team Selection

The standard drafting team selection process shall be limited to just those candidates who have already been identified as having the appropriate security clearance, the requisite technical expertise, and either have signed or are willing to sign a strict confidentiality agreement.

Standards Committee Authority

Depending upon the level of urgency, the Standards Committee's Officers may authorize reducing or eliminating the 35-day pre-ballot review period, and may reduce the duration of both the initial ballot and the recirculation ballots to as few as 5 days, and shall allow significant modifications between the initial ballot and the recirculation ballot.

Work of Drafting Team

The standard drafting team shall perform all its work under strict security and confidential rules. The standard drafting team shall develop the new or revised standard, its implementation plan, and working with NERC staff shall develop associated VRFs and VSLs.

²⁹ The NERC board may direct the immediate development and issuance of an Essential Action alert and then may also direct the immediate development of a new or revised reliability standard.

The standard drafting team shall review its work, to the extent practical, as it is being developed with officials from the appropriate governmental agencies in the U.S. and Canada, under strict security and confidentiality rules.

Formal Stakeholder Comment & Ballot Window

The draft standard, its implementation plan and VRFs and VSLs shall be distributed for a formal comment period, under strict confidentiality rules, only to those entities that are listed in the NERC compliance registry to perform one of the functions identified in the applicability section of the standard and have identified individuals from their organizations that have signed confidentiality agreements with NERC.³⁰ At the same time, the standard shall be distributed to the members of the ballot pool for review and ballot. The standards staff shall not post or provide the ballot pool with any confidential background information.

The drafting team, working with the standards staff, shall consider and respond to all comments, make any necessary conforming changes to the standard, its implementation plan, and its VRFs and VSLs and shall distribute the comments, responses and any revision to the same population as received the initial set of documents for formal comment and ballot.

Board of Trustee Actions

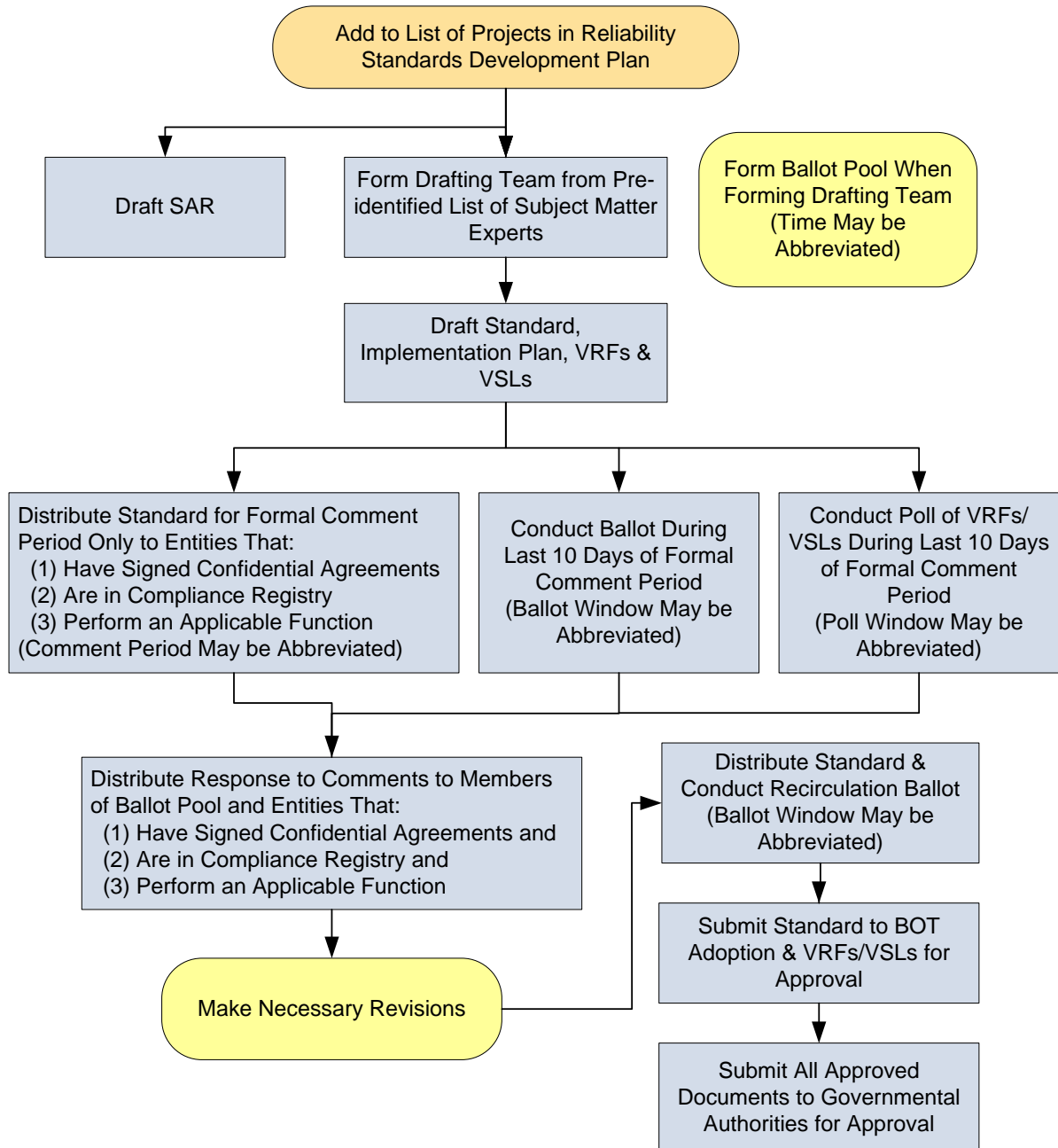
Each standard and implementation plan developed through this process shall be submitted to the NERC Board of Trustees for adoption and the associated VRFs and VSLs shall be filed with the Board of Trustees for approval.

Governmental Approvals

All approved documents shall be filed for approval with applicable governmental authorities.

³⁰ In this phase of the process, only the proposed standard shall be distributed to those entities expected to comply, not the rationale and justification for the standard. Only the special drafting team members, who have the appropriate security credentials, shall have access to this rationale and justification.

Developing a Standard Responsive to an Imminent, Confidential Issue



Process for Developing Standards Responsive to Non-imminent, Confidential Issues

If the NERC Board of Trustees directs the immediate development of a new or revised reliability standard to address a confidential national security emergency situation, the standards staff shall develop a SAR, form a ballot pool (to vote on the standard and its implementation plan and to participate in the non-binding poll of VRFs and VSLs) and assemble a slate of pre-defined subject matter experts as a proposed drafting team for approval by the Standards Committee's Officers. All members of the Registered Ballot Body shall have the opportunity to join the ballot pool.

Drafting Team Selection

The drafting team selection process shall be limited to just those candidates who have already been identified as having the appropriate security clearance, the requisite technical expertise, and either have signed or are willing to sign a strict confidentiality agreement.

Work of Drafting Team

The drafting team shall perform all its work under strict security and confidential rules. The standard drafting team shall develop the new or revised standard, its implementation plan, and working with NERC staff shall develop associated VRFs and VSLs.

The drafting team shall review its work, to the extent practical, as it is being developed with officials from the appropriate governmental agencies in the U.S. and Canada, under strict security and confidentiality rules.

Formal Stakeholder Comment & Ballot Window

The draft standard, its implementation plan and VRFs and VSLs shall be distributed for a formal comment period, under strict confidentiality rules, only to those entities that are listed in the NERC compliance registry to perform one of the functions identified in the applicability section of the standard and have identified individuals from their organizations that have signed confidentiality agreements with NERC.³¹ At the same time, the standard shall be distributed to the members of the ballot pool for review and ballot. The standards staff shall not post or provide the ballot pool with any confidential background information.

Revisions to Standard, Implementation Plan, VRFs and VSLs

The drafting team, working with the standards staff shall work to refine the standard, implementation plan, VRFs and VSLs in the same manner as for a new standard following the "normal" standards development process described earlier in this manual with the exception that distribution of the comments, responses, and new drafts shall be limited to those entities that are in the ballot pool and those entities that are listed in the NERC compliance registry to perform one of the functions identified in the applicability section of the standard and have identified individuals from their organizations that have signed confidentiality agreements with NERC.

Board of Trustee Action

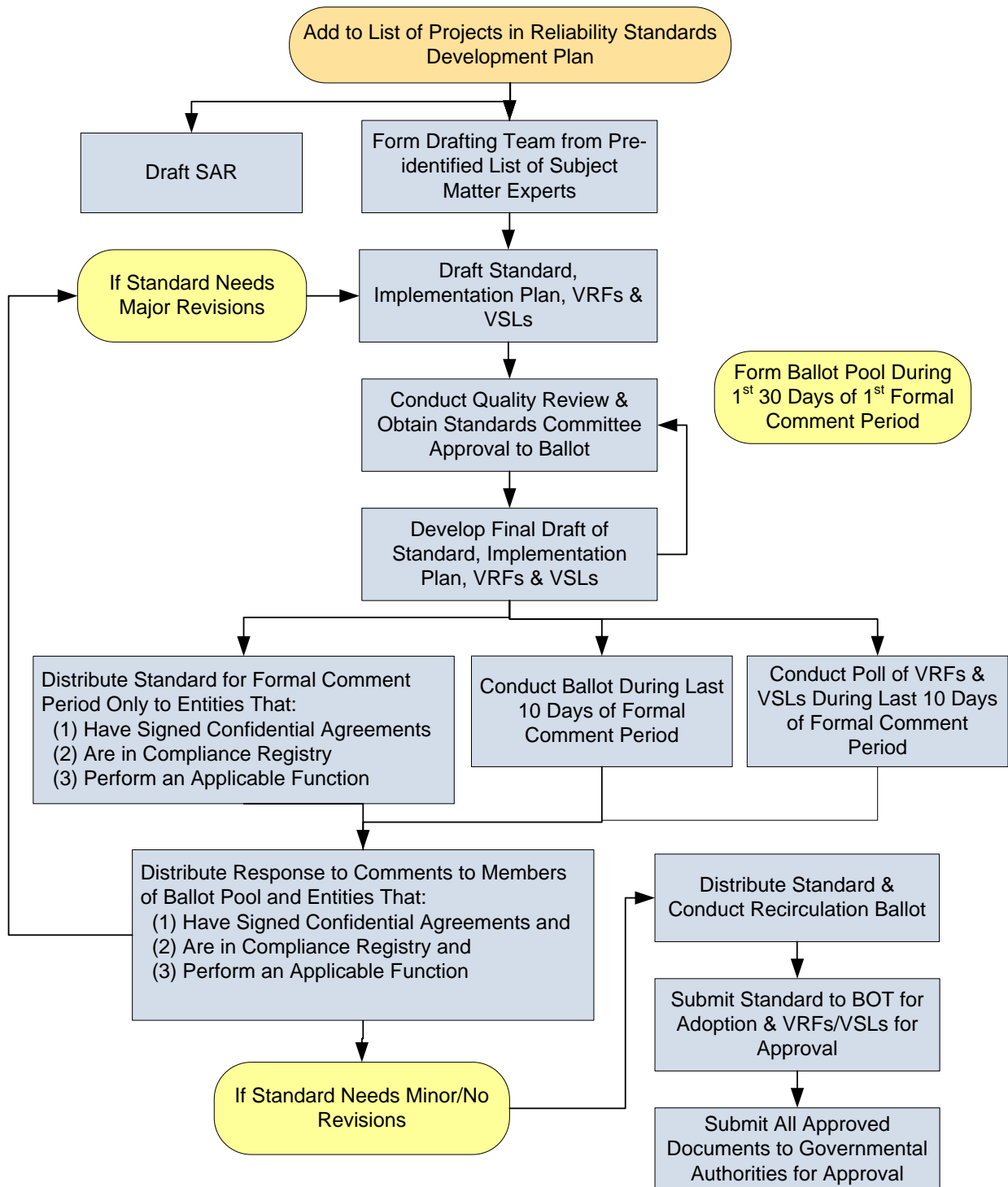
Each standard and implementation plan developed through this process shall be submitted to the NERC Board of Trustees for adoption and the associated VRFs and VSLs shall be filed with the Board of Trustees for approval.

Governmental Approvals

All approved documents shall be filed for approval with applicable governmental authorities.

³¹ In this phase of the process, only the proposed standard shall be distributed to those entities expected to comply, not the rationale and justification for the standard. Only the special drafting team members, who have the appropriate security credentials, shall have access to this rationale and justification.

Developing a Standard Responsive to a Non-imminent, Confidential Issue



Process for Approving Supporting Documents

The following types of documents are samples of the types of supporting documents that may be developed to enhance stakeholder understanding and implementation of 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.

While most supporting documents are developed by the drafting team working to develop the associated standard, any entity may develop a supporting document associated with a reliability standard.

The Standards Committee shall authorize the posting of all supporting references³² that are linked to an approved standard. Prior to granting approval to post a supporting reference with a link to the associated standard, the Standards Committee shall verify that the document has had stakeholder review to verify the accuracy of the technical content. While the Standards Committee has the authority to approve the posting of each such reference, stakeholders, not the Standards Committee, verify the accuracy of the document's contents.

Type of Document	Description
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.
Guideline	Recommended process that identifies a method of meeting a requirement under specific conditions.
Supplement	Data forms, pro forma documents, and associated instructions that support the implementation of a reliability standard.
Training Material	Documents that support the implementation of a reliability standard.
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.

³² The Standards Committee's Procedure for Approving the Posting of Reference Documents is posted on the Reliability Standards Resources Web Page.

Process for Correcting Errata

From time to time, an error may be discovered in an approved reliability standard. If the Standards Committee agrees that the correction of the error does not change the scope or intent of the associated standard, and agrees that the correction has no material impact on the end users of the standard, then the correction shall be submitted for information to the NERC Board of Trustees and filed for approval with applicable governmental authorities. The NERC Board of Trustees has resolved to concurrently approve any errata approved by the Standards Committee.

Process for Conducting Five-Year Review

Each reliability standard developed through NERC's ANSI-accredited standards development process shall be reviewed at least once every five years from the effective date of the standard or the date of the latest Board of Trustees adoption to a revision of the standard, whichever is later.

The *Reliability Standards Development Plan* shall include projects that address this five-year review of standards.

- If a standard is nearing its five-year review and has issues that need resolution, then the *Reliability Standards Development Plan* shall include a project for the complete review and review and associated revision of that standard that includes addressing all outstanding governmental directives, all approved interpretations, and all unresolved issues identified by stakeholders.
- If a standard is nearing its five-year review and there are no outstanding governmental directives interpretations, or unresolved stakeholder issues associated with that standard, then the *Reliability Standards Development Plan* shall include a project solely for the "five-year review" of that standard.

For a project that is focused solely on the five-year review, the Standards Committee shall appoint a review team of subject matter experts to review the standard and recommend whether the standard should be reaffirmed, revised, or withdrawn. Each review team shall post its recommendations for a 45-day formal stakeholder comment period and shall provide those stakeholder comments to the Standards Committee for consideration.

- If a review team recommends reaffirming a standard, the Standards Committee shall submit the reaffirmation to the Board of Trustees for adoption and then to governmental authorities for approval. Reaffirmation does not require approval by stakeholder ballot.
- If a review team recommends modifying or withdrawing a standard, the team shall develop a SAR with such a proposal and the SAR shall be submitted to the Standards Committee for prioritization as a new project. Each existing standard recommended for modification or withdrawal shall remain in effect in accordance with the associated implementation plan until the action to modify or withdraw the standard is approved by its ballot pool, adopted by the Board of Trustees, and approved by applicable governmental authorities.

In the case of reaffirmation of a standard, the standard shall remain in effect until the next five-year review or until the standard is otherwise modified or withdrawn by a separate action.

Public Access to Standards Information

Online Standards Information System

The standards staff shall maintain an electronic copy 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.

Archived Standards Information

The staff shall maintain a historical record of reliability standards information that is no longer maintained online. 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 staff of a written request.

Process for Updating Standards Processes

Requests to Revise the Standard Processes Manual

Any person or entity may submit a request to modify one or more of the processes contained within this manual. The Standards Committee shall oversee the handling of each request. The Standards Committee shall prioritize all requests, merge related requests, and respond to each sponsor within 30 calendar days.

The Standards Committee shall post the proposed revisions for a 45-day formal comment period. Based on the degree of consensus for the revisions, the Standards Committee shall:

- a. Submit the revised process or processes for ballot pool approval;
- b. Repeat the posting for additional inputs after making changes based on comments received;
- c. Remand the proposal to the sponsor 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 submit to the board a description of the basis for the changes, a summary of the comments received, and any minority views expressed in the comment and ballot process. The proposed revisions shall not be effective until approved by the NERC Board of Trustees and applicable governmental authorities.

Appendix 3B

Election Procedure for Members of the 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)¹ 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 valid² 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.

¹ 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.

² 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.³
4. Nominee organization (must be an entity registered in the designated Segment).³
5. Nominee contact information: telephone, fax, e-mail, and mailing address.³
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

³ 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 Segment⁴. 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.

⁴ Each entity in the Segment is allowed to cast two votes. This criterion means that more than fifty percent (>50%) of the entities cast one of their votes for that nominee.

In the event of a tie between two or more candidates after a second ballot, a run-off ballot may be used to break the tie. The position shall remain vacant until the tie is broken by the Segment.

Representation from Canada

To achieve balance of representation between the United States and Canada on the basis of net energy for load (NEL), the following special procedure shall apply:

1. If any regular election of Standards Committee members does not result in at least two Canadian members being elected, the Canadian nominees receiving the next highest percentage of votes within their respective Segment(s) will be designated as members, as needed to achieve a total of two Canadian members;
2. Each such specially designated Canadian member of the Standards Committee shall have a one year term, as the Standards Committee holds elections each year and special designation of members should not interfere with the regular election process;
3. If any segment, as defined in Appendix B of the Reliability Standards Development Procedure, has an unfilled position following the annual Standards Committee election, the first preference is to assign each specially designated Canadian representative to an unfilled segment for which he or she qualifies;
4. Any such specially designated members of the Standards Committee shall have the same rights and obligations as all other members of the Standards Committee;
5. For the purpose of the Standards Committee election process, Canadian representation shall be defined as: any company or association incorporated in Canada, any agency of a federal, provincial, or local government in Canada, or any person with Canadian citizenship.

Special Elections

Between regularly scheduled elections, a Segment may hold a special election to replace an existing member or fill a vacant position. A special election request may be requested by petition of ten entities or 25% of the entities registered in a Segment, whichever is less. It is the responsibility of the requester(s) to collect the requisite number of signatories to the petition and submit it to the SPM.

If SPM receives a valid petition for a special election, the SPM shall request that the Segment ratify the need for a special election. Ratification requires approval by a two-thirds majority of the entities registered in the Segment. If the request is ratified by the Segment, the SPM shall initiate the request for nominations and election as described later in this procedure.

Alternative Procedures

This procedure is provided as the default method for Segments to elect representatives to the Standards Committee. Alternative procedures may be used by a Segment, or jointly by several Segments. Such a procedure shall be consistent with the principles noted in this document. Such a procedure shall be ratified by at least two-thirds of the registered entities in each Segment in which it will be applied, and is subject to review by the NERC Board.

CHI\4513839.1



Sanction Guidelines of the North American Electric Reliability Corporation

Effective: January 1, 2011

**Modified to exclude sections not included
in Manitoba Regulations**

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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.

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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 manner¹.

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.

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.

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

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 Factors² 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.
- 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.

² See Section 4 Part 4.11 for a discussion of these factors

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 Levels³. Accordingly, the time horizon element of a violation will be considered when determining the Base Penalty Amount⁴ 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.

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 See Section 4 Part 4.11 for a discussion of these factors.

⁴ See Section 4 Part 4.2

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.

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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 violation⁵. 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 violate⁶. 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 table⁷.

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-

⁵ 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.

⁶ Reference: Section 3 Parts 3.15 and 3.16.

⁷ 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 established⁸ 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 circumstances⁹ 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.

⁸ 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] .

⁹ 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 Pay¹⁰

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.

¹⁰ 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 that is immediately necessary to terminate or correct to protect the reliability of the bulk power system from an imminent threat. 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 immediately to protect the reliability of the bulk power system from the imminent threat that NERC or the regional entity has identified.

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, and that present an imminent threat to the reliability of the bulk power system. 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.

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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 imminent 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 Severity Level							
Violation Risk Factor	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.

Appendix 5A

**Organization Registration and
Certification Manual**

Effective: June 10, 2010

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Section I — Executive Summary

Overview

The purpose of this document is twofold: (1) to define the process utilized in the Organization Registration Program by identifying which functional entities must register as owners, operators, and users of the bulk power system for compliance with reliability standards; and (2) to define the process utilized in the Organization Certification Program for certifying the following entities: Reliability Coordinator (RC), Balancing Authority (BA), and Transmission Operator (TOP). The NERC Compliance and Certification Committee (CCC) is responsible for approving and forwarding these processes to the NERC Board of Trustees for its approval. Where a proposal for revisions to these processes comes to the Board of Trustees from sources other than the CCC, the Board of Trustees will seek the concurrence of the CCC before taking action on the proposal.

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.

	Entities that Must Register	Entities that Need to be Certified
Reliability Coordinator (RC)	√	√
Transmission Operator (TOP)	√	√
Balancing Authority (BA)	√	√
Planning Coordinator (PC)	√	
Transmission Planner (TP)	√	
Transmission Service Provider (TSP)	√	
Transmission Owner (TO)	√	
Resource Planner (RP)	√	
Distribution Provider (DP)	√	
Generator Owner (GO)	√	
Generator Operator (GOP)	√	
Load-Serving Entity (LSE)	√	
Purchasing-Selling Entity (PSE)	√	
Interchange Authority (IA)	√	
Reserve Sharing Group (RSG)	√	

When did These Processes Begin?

The initial registration process began in January of 2006. Registration of new entities is an ongoing process. If a Registered Entity's information changes, these changes must be submitted to the applicable Regional Entity(s).

Certification is ongoing for new entities in accordance with Section IV of this manual.

Where to Access and Submit Form(s)?

Registration and certification forms are provided on each Regional Entity's [website](#). Completed forms are to be sent electronically to the compliance and certification manager of the applicable Regional Entity(s). It is desirable that entities operate within a single Regional Entity reliability region; however, if an entity operates in more than one Region, separate registration applications must be completed and submitted to each of the Regional Entities.

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 per the Regional Entity's delegation agreement with NERC.
 - b. Coordination of process execution when an entity is registering and/or certifying with multiple Regional Entities.
2. Manage each entity's NERC Compliance Registry identification number (NERC ID) including:
 - a. Sending a registration or certification letter that contains the NERC ID to the applicable Regional Entity(ies) for review and approval. If the Regional Entity(ies) agrees with all the information provided, it will notify NERC to issue the NERC ID to the registered entity and will send a copy of the notification being provided to the Regional Entity(ies).
 - b. Ensuring each entity has only one NERC ID for all Regional Entities in which registered.
3. Make modeling changes based on registration information.
4. Maintain accurate registration and certification records including granting certification certificates for the entity(ies) responsible for compliance (including JRO/CFR).
5. Maintain published up-to-date list of registered entities (i.e. the NERC Compliance Registry) on the NERC website.

Regional Entity

1. Performs data collection and mapping of Bulk Power System facilities and those facilities that have a material impact on the Bulk Power System within its Regional Entity defined reliability region boundaries.
2. Approves or disapproves entity registration applications.

3. Reviews entity certification applications for completeness.
4. Notifies NERC of entities registered with the Regional Entity.
5. Approves or denies Certification Team (CT) recommendations and notifies the entity and NERC of the decision.
6. Provides leadership to the CT throughout the certification process.

Entity Submitting the Application

1. Completes and submits registration and/or certification application.
2. Submits updates to registration and/or certification information as necessary and/or requested.
3. Responds to Regional Entity and/or NERC questions pertaining to registration and/or certification.
4. Provides documentation or other evidence requested or required to verify compliance with certification requirements.

Section II — Introduction to Organization Registration and Organization Certification Processes

The processes utilized to implement the Organization Registration and Organization Certification Programs are administered by each Regional Entity. Pursuant to its delegation agreement with NERC, each Regional Entity is responsible for registering and certifying industry participants within its Regional Entity reliability region boundaries. 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 below must register for each function through the Organization Registration Program. These entities are defined in the NERC Glossary of Terms used in reliability standards with responsibilities designated by the individual standards and the NERC *Statement of Compliance Registry Criteria* document.

- Reliability Coordinator
- Transmission Operator
- Balancing Authority
- Planning Coordinator
- Transmission Planner
- Transmission Service Provider
- Transmission Owner
- Resource Planner
- Distribution Provider
- Generator Owner
- Generator Operator
- Load-Serving Entity
- Purchasing-Selling Entity
- Interchange Authority
- Reserve Sharing Group

The registration procedure is in Section III of this manual.

Organization Certification

All entities registered in the NERC Compliance Registry (NCR) for the RC, TOP, and/or BA functions shall be certified. Certification requires the entity to start operation within 12 months of being NERC certified. This certification process is described in Section IV of this manual.

Section III — Organization Registration Process

Purpose and Scope

The purpose and scope of this process is to provide guidance on how a user, owner, and/or operator of the bulk power system should be registered in the NCR.

Overview

Section 39.2 of the Commission's regulations, and Title 18 of the C.F.R. § 39.2, requires each owner, operator, and user of the bulk power system to be registered with NERC and to comply with approved reliability standards.

Owners, operators, and users of the bulk power system will be registered by function(s) and are:

1. Responsible for compliance with all applicable requirements/sub-requirements within reliability standards approved by applicable government authorities, for the applicable functions for which the applicable entity is registered; and,
2. Subject to the compliance monitoring and enforcement requirements of Section 400 of the Rules of Procedure.

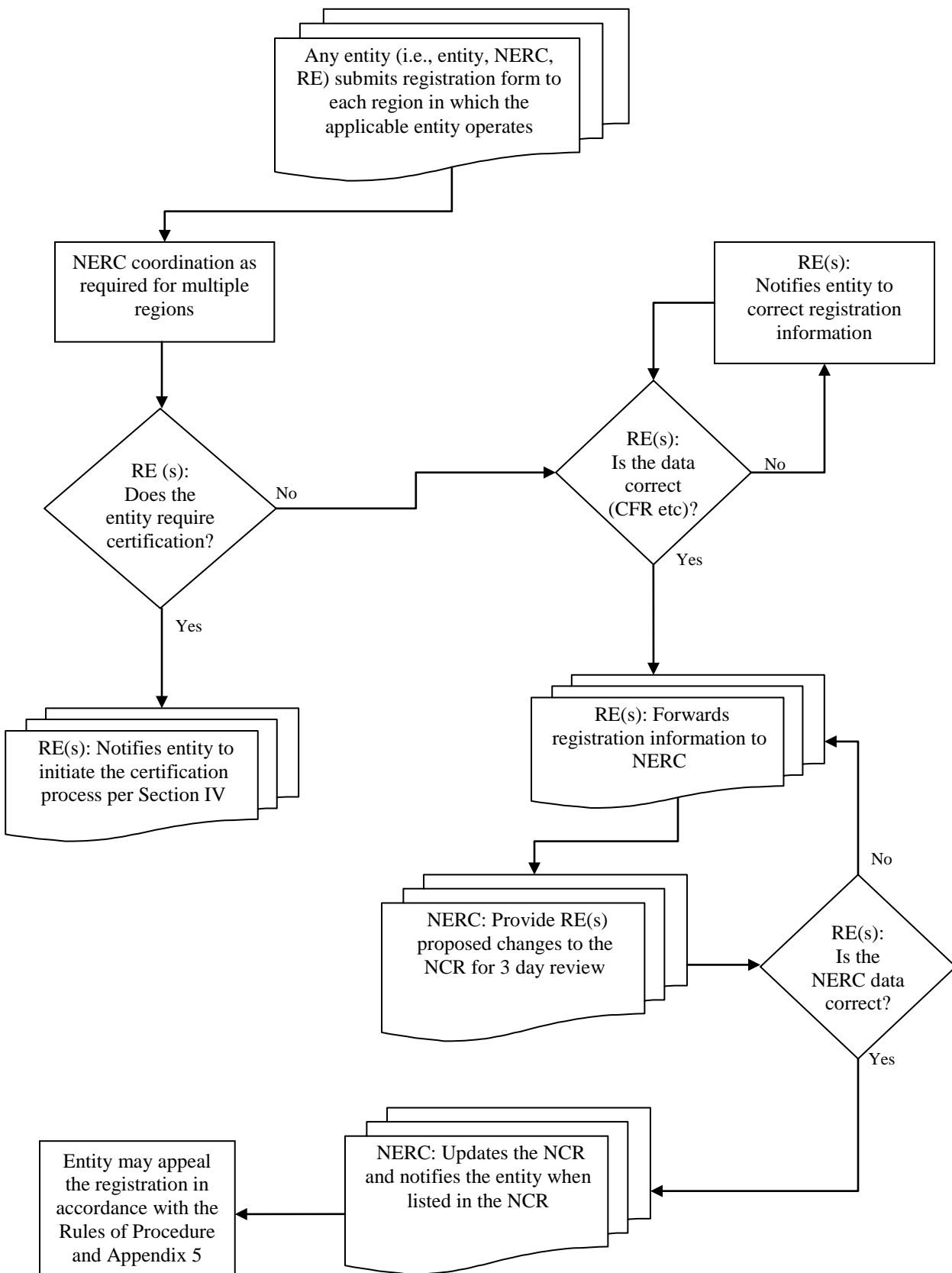
See Figure 1 *Organization Registration Process Overview*.

Organization Registration Process

1. Applicable entities shall begin the registration process by submitting a completed registration application to the Regional Entity(ies) of the reliability region(s) where the entity intends to perform its function(s) (registration forms are provided on each Regional Entity's [website](#)).
 - a. At any time an entity may recommend in writing, with supporting documentation, to the Regional Entity(ies) that an entity be added to or removed from the compliance registry.
 - b. The registration process for an entity may also be initiated by a Regional Entity, NERC, or applicable governmental authority.
2. NERC shall coordinate registration of entities that are required to register with multiple Regional Entities in order to ensure consistency of the registration process.
3. For entities that are required to be certified, the applicable Regional Entity(ies) shall ensure that the registration information provided is accurate for updating the NCR per items 4 through 12 below and notifies the entity to initiate the certification process per Section IV of this manual.
4. Entities that have a NERC ID shall use it on the form.
 - a. If an entity does not have a NERC ID, NERC shall assign one.
 - b. An entity responsible for more than one function will use a single NERC ID.

5. Regional Entities shall evaluate the submitted information and determine if the information is complete/correct. If the information is not complete/correct, the entity will be notified to complete/correct or clarify the registration information.
6. A single entity must register for all functions that it performs itself. In addition, that entity may register as a Joint Registration Organization (JRO) on behalf of one or more of its members or related entities for one or more functions for 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 for all requirements/sub-requirements of reliability standards applicable to that function or those functions including reporting requirements.(Rules of Procedure Section 507)
7. Multiple entities may each register using a Coordinated Functional Registration (CFR) for one or more reliability standard(s) and/or for one or more requirements/sub-requirements within particular reliability standard(s) applicable to a specific function.(Rules of Procedure Section 508)
8. In completing the regional entity responsibilities for the registration process, the following are key items the Regional Entity must verify:
 - a. That Regional Entity registrations meet the geographical and electrical registration boundaries requirements of the Rules of Procedure Section 501(1.4).
 - b. The registration submission includes all data requested by NERC that is necessary for accurately identifying and contacting the registered entity.
9. The Regional Entity shall forward all registration information to NERC:
 - a. NERC forwards the proposed additions or changes to the NCR to the Regional Entity for review and comments.
 - b. The Regional Entity has 5 working days to respond to the proposed changes.
 - c. If NERC does not receive any comments, the NCR will be revised.
10. NERC updates the NCR and notifies the applicable entity(ies) within 5 days of the update.
11. The entity may appeal the registration in accordance with the Rules of Procedure Section 500 and Section V of Appendix 5.
12. The NCR shall be dynamic and will be revised as necessary to take account of changing circumstances such as corrections, revisions, and or deletions. Per the Regional Entity's delegation agreement, the Regional Entity will take any recommendation received under Section 1.a, and other applicable information, under advisement as it determines whether an entity should be on the NCR.
 - a. Each entity identified in the NCR shall notify its corresponding Regional Entity and/or NERC of any corrections, revisions, deletions, 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 the standards. (Rules of Procedure Section 400).

Figure 1: Organization Registration Process Overview



Section IV — Organization Certification Process

Purpose and Scope

The purpose and scope of this process is to provide guidance for completing the certification of a new entity that will become NERC certified and registered as an RC, TOP, or BA.

Overview

See Figure 2 *Organization Certification Process Overview* for an overview of the certification process.

Organization Certification Process

1. Certification:

- a. An entity in a single Regional Entity reliability region shall initiate the certification process by completing a certification application (certification applications are provided on each Regional Entity's [website](#)) and sending it to the Regional Entity which will manage the certification process.
- b. An entity in multiple Regional Entity reliability regions shall initiate the certification process by completing a certification application (certification applications are provided on each Regional Entity's [website](#)) and sending it to the Regional Entities in those reliability regions. Each Regional Entity will inform NERC of the request. The Regional Entities will determine which Regional Entity will provide the leadership to manage the certification process.
- c. Provisional Certification Process - All Reliability Coordinator Balancing Authorities, and/or Transmission Operators that were already registered and operating on June 18, 2007 become "NERC Certified" upon completion of (1) a NERC Readiness Evaluation (on site activities completed by the evaluation team); and (2) a CMEP audit (on site activities completed by the audit team) after June 18, 2007. Recertification on a periodic basis of these entities will not be required. Demonstration of ongoing satisfactory performance of applicable RC, BA, and TOP functional requirements shall be accomplished by completion of a CMEP audit every three years per the requirements of the NERC Rules of Procedure.

2. For an entity that is not required to be certified, the Regional Entity(ies) shall reject the application and notify the entity that certification is not required.
3. If the application is not complete or accurate, the Regional Entity will notify the entity to revise the application as needed. When the application is deemed complete and accurate, it will be accepted. The entity and the Regional Entity shall agree to a timeline including specific milestones for the certification process.
4. The decision to certify changes to an already operating and certified entity is a collaborative decision between the affected Regional Entity(s) and NERC. NERC has the final authority regarding this decision. Items to consider for this decision include one or more of the following:

- a. Changes to an entity's footprint or operational challenges (i.e., TLRs) due to the changes
 - b. Organizational restructuring that could impact the BPS reliability
 - c. Relocation of the control center
 - d. Changes to entity ownership requiring major operating procedure changes
 - e. Significant changes to JRO / CFR assignments or agreements changes
 - f. Addition or removal of member JRO / CFR utilities or entities
 - g. Complete replacement of a SCADA/EMS system
5. The certification process shall be completed within nine months of the date of acceptance of the application unless agreed to by all parties involved in the process and approved by NERC.
6. The Regional Entity(ies) shall notify NERC that the certification process has begun to enable NERC to carry out its roles and responsibilities.
7. The Regional Entity will send a questionnaire with a submission deadline and a statement of expectations to all entities participating in the certification process. These questionnaires and other related documents are located on the [NERC Web site](#). The Regional Entity shall distribute questionnaires and other related documents to the following entities, as required:
 - a. Entity seeking certification.
 - b. Participating BAs, RCs, and TOPs in footprints in which the entity intends to operate or with which the entity intends to interconnect transmission facilities.
 - c. Participating TOs, TSPs, PAs, GOs, IAs, GOPs, TPs, DPs, and/or other applicable entities.
8. The Regional Entity shall assemble a Certification Team (CT) that will be responsible for performing the activities included in the certification process.
 - a. The CT members shall adhere to NERC's confidentiality agreements for any data or information made available to the CT member through the certification process. Team members shall not be employees of or have a direct financial interest in the entity or any of its affiliates.
 - b. The Regional Entity, with concurrence of NERC, may increase or decrease the distribution of the questionnaires and other related documents based upon the complexity of the certification.
 - c. If the entity objects to any member of the CT, the entity must make that known, in writing, to the Regional Entity listing the reasons for the objection. The Regional Entity will either replace the team member or respond with written justification for keeping the member on the team.
 - d. CT composition
 - i. The BA CT shall consist of representatives from an existing BA, the entity's proposed RC, TOP, each affected Regional Entity, and NERC.
 - ii. The RC CT shall consist of representatives from an existing RC, a BA and a TOP in the proposed RC area, each affected Regional Entity, and NERC.

- iii. The TOP CT shall consist of representatives from an existing TOP, the entity's proposed RC, each affected Regional Entity, and NERC.
 - iv. Additional CT members with expertise in the any of the NERC registry functional areas can be added as necessary.
 - v. Additional CT members from NERC or Regional Entity staff may be added as necessary.
 - vi. Entities such as government representatives or other stakeholders may be observers in the certification process.
- 9. Each CT member must complete the NERC auditor training prior to participation.
- 10. The CT will review the entity's submitted documentation and address any issues prior to the site visit.
- 11. The CT shall inform the entity before the on-site visit of any documentation or clarification that is necessary to support the questionnaires.
- 12. The entity shall identify to the CT prior to the on-site visit all standards or requirements/sub-requirements which have been delegated to another entity.
 - a. The CT will review the entity(ies) ability to perform those delegated requirements/sub-requirements or standards.
- 13. The CT shall conduct at least one on-site visit to the entity's facilities. At a minimum, the team will:
 - a. Review with the entity the data collected through the questionnaires, and such data that is available only onsite;
 - b. Interview the operations and management personnel;
 - c. Inspect the facilities and equipment associated with the applicable reliability standards referenced in the questionnaire;
 - d. Request demonstration of all tools identified in the certification process;
 - e. Review documents and data including agreements, processes, and procedures identified in the certification process;
 - f. Verify operating personnel NERC certification documents and proposed work schedules; and,
 - g. Review any additional documentation resulting from inquiries arising during the site-visit.
- 14. The entity, in conjunction with the CT, shall attempt to resolve any deficiencies prior to issuance of the draft report.
- 15. The draft report is provided to the entity for review for fourteen (14) days and any resulting comments will be assessed by the CT for possible inclusion in the report.
- 16. The Regional Entity(ies) may grant a time extension, not to exceed 180 days, to the entity to allow the entity to resolve any open certification issues.
- 17. The CT shall provide a certification recommendation and identification of audit deficiencies in the final written report. All members of the CT shall have an equal voice in the certification recommendation. This allows for a minority opinion if the review team cannot

reach a consensus. The final written certification report is distributed to NERC, the entity, and the other affected Regional Entities, as applicable.

18. The following is the format for the final report:

- Title page
- Table of Contents
- Introduction – A brief discussion on the Regional Entity(ies) involved, the entity being certified, a description of the function the entity(ies) are being certified for, and a brief timeline of the certification project
- Certification Team (CT) – Provide the team makeup.
- Objective and Scope – Discussion on entity application (who, what, when, & how).
- Overall Conclusion – Recommendation being made by the CT.
- Certification Team Findings – Any item(s) needing to be closed prior to operation that do not hinder the certification team from making a recommendation.
- Positive Observations.
- Company History – Discussion on the applicant's company history.
- Company Details– Specific details regarding why the entity is being certified and its relationship with other entities (BAs, RCs, and TOPs etc).
- Documentation List – Provide a list of critical documentation reviewed by the CT used to make the CT's conclusion and the documentation retention requirements.
- Attachments – Describe those attachments that are for public viewing and those that are separated from the report due to confidentiality issues such as Critical Infrastructure documentation.

19. Certification recommendation and approval.

- a. If the entity intends to operate in a single Regional Entity's reliability region, the CT shall make a certification recommendation to that Regional Entity. The Regional Entity shall approve or disapprove the recommendation. The Regional Entity shall notify the entity and NERC of the certification decision.
- b. If the entity intends to operate in multiple Regional Entities, the CT shall make a certification recommendation to all applicable Regional Entities in a single report. Certification recommendation by the Regional Entities must be unanimous. The Regional Entities shall notify the entity and NERC of the certification decision.
- c. NERC shall approve or disapprove all final certification recommendations and notify the entity of the decision.

20. The entity may appeal the decision in accordance with the NERC Rules of Procedure and Section VI of this manual.

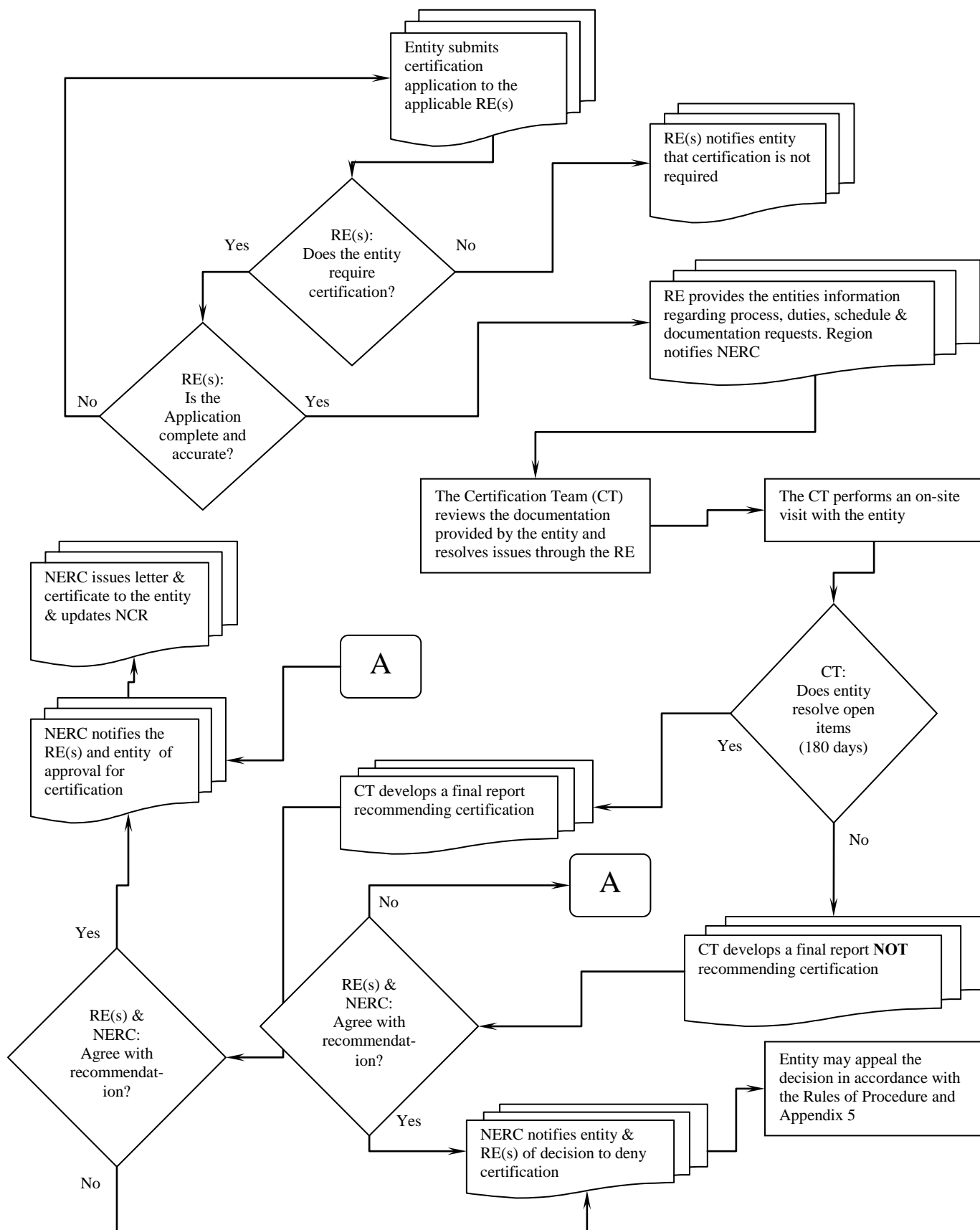
21. If the entity is approved for certification, NERC shall provide the entity a certification letter and a NERC certificate indicating that that entity is NERC certified as a BA, RC, and/or TOP as applicable.

- a. For those CFR entities that agree upon a division of compliance responsibilities for one or more reliability standards or requirements/sub-requirements, NERC shall provide all

entities responsible for BA, RC and/or TOP requirements/sub-requirements and approved for certification as BA, RC and/or TOP a NERC certificate indicating that those entities are NERC certified as a BA, RC, and/or TOP.

- b. NERC shall update the registry prior to the entity(s) going operational.
22. After the entity has been awarded certification, the Regional Entity(ies) shall notify all applicable entities as to the date that the entity may begin its operation as a certified entity. The entity must commence operation within 12 months of certification. Failure to begin operation within the 12-month period shall require the entity to reapply for certification.

Figure 2: Organization Certification Process Overview



Section V — NERC Organization Registration Appeals Process

Purpose and Scope

This section describes the process that any organization may appeal its listing and functional assignment on the NCR.

Overview

NERC has established documented procedures to ensure 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. See Figure 3, *Organization Registration Appeals Process Overview*.

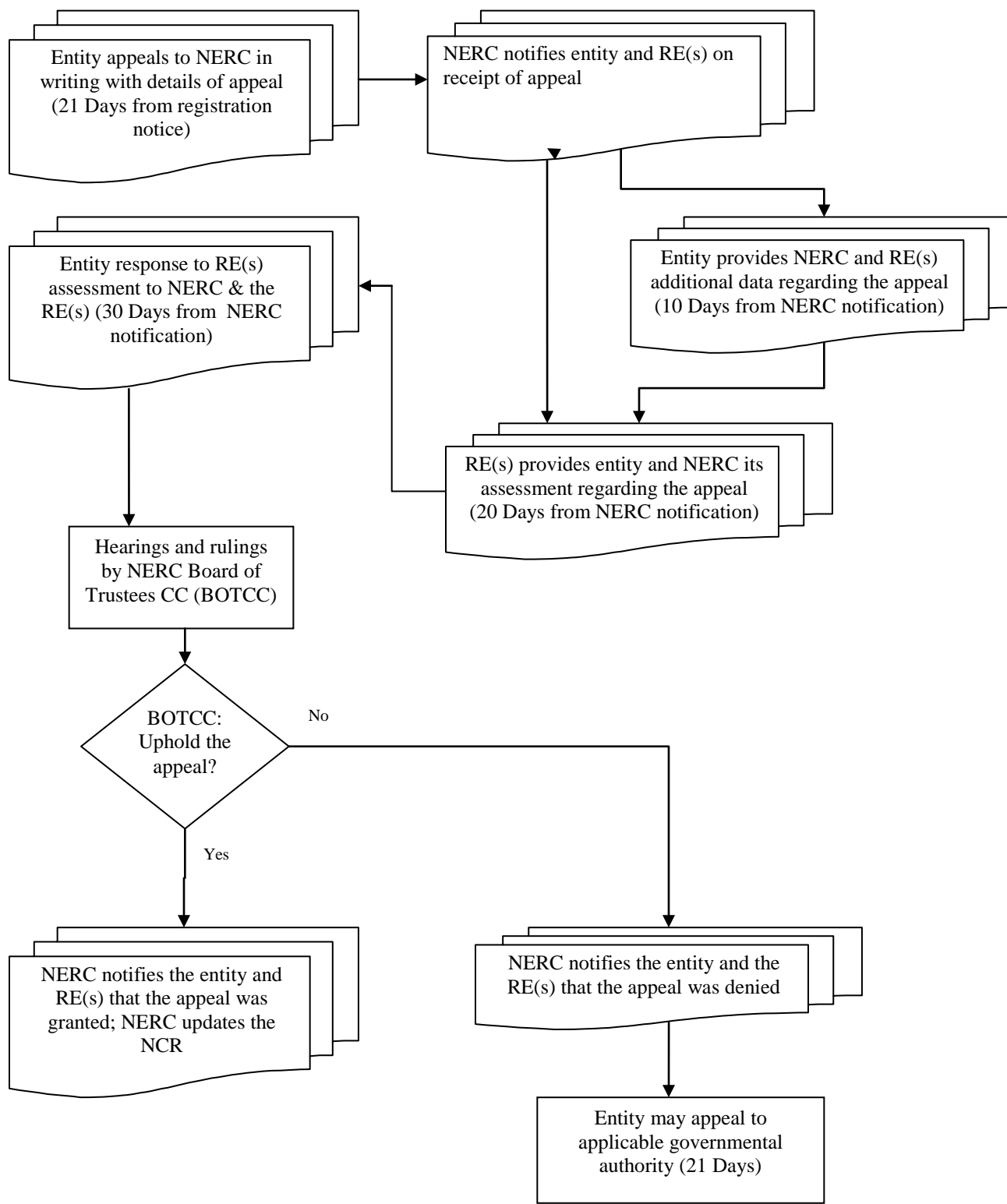
Organization Registration Appeals Procedure

Any entity included on the NCR may challenge its listing and functional assignments with NERC.

1. All registration appeals must be filed in writing to NERC, via registered mail. Appeals are sent to:
Vice President and Director of Compliance
North American Electric Reliability Corporation
116-390 Village Blvd.
Princeton, New Jersey, 08540
2. Each party in the appeals process shall pay its own expenses for each step in the process.
3. A stipulation of invoking the appeals process is that the Regional Entity or entity requesting the appeal agrees that NERC (its members, Board of Trustees, committees, subcommittees, and staff), any person assisting in the appeals process, and any company employing a person assisting in the appeals process, shall not be liable for, and 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.
4. Parties retain the right to seek further review of a decision in whatever regulatory agency or court that may have jurisdiction.
5. All appeals must be received within 21 days of receipt of the NERC letter informing the entity that it is listed on the NCR. The appeal must state why the entity believes it should not be registered based on the NERC Rules of Procedure and the *NERC Statement of Compliance Registry Criteria*.

6. After receipt of the appeal, the registered entity has a 30 day period to work with the Regional Entity to resolve the appeal, if possible. If the appeal is resolved, the Regional Entity will notify NERC with the details of the resolution and NERC will close the appeal.
7. At any time through this appeals process, an entity may agree with the decision and/or agree to close the appeal. NERC shall notify the involved parties and the NERC Board of Trustees Compliance Committee (BOTCC) that the appeal is resolved and update the NCR as applicable.
8. NERC will notify the entity and the applicable Regional Entity(ies) regarding the appeal with the following expectations:
 - a. The entity will provide NERC and the applicable Regional Entity(ies) any additional data supporting its appeal within 10 days of the date of the NERC appeal notification.
 - b. The applicable Regional Entity(ies) will provide a copy of its assessment directly to the entity, as well as to NERC, within 20 days of the date of the NERC appeal notification.
 - c. The entity may submit a response to the Regional Entity(ies) assessment, with copies to the Regional Entity(ies) and NERC, within 30 days of the date of the NERC appeal notification.
 - d. To ensure there is no confusion with respect to the rights and responsibilities of the entity during the appeal process, the notification also confirms whether the entity will remain on the NERC Compliance Registry and will be responsible for compliance with approved reliability standards applicable to the function under appeal during the appeal.
9. Hearing and Ruling by the BOTCC
 - a. The BOTCC will resolve registration disputes.
 - b. The BOTCC may request additional data from NERC, the relevant Regional Entity(ies) or the entity, and prescribe the timeframe for the submitting the requested data.
 - c. The BOTCC will provide a written decision regarding any appeals, along with the basis for its decision.
 - d. If the BOTCC upholds the appeal, NERC will:
 - Notify the entity and Regional Entity(ies) that the appeal was granted.
 - Update the NCR.
 - e. If the BOTCC does not uphold the appeal, NERC will:
 - Notify the entity and the Regional Entity(ies) that the appeal was denied.
 - The entity may appeal to FERC or applicable Canadian Provincial regulator within 21 days of the notification of the decision.
 - f. A record of the appeals process shall be maintained by NERC. Confidentiality of the record of the appeal will be based on the NERC Rules of Procedure Section 1500.

Figure 3: Organization Registration Appeals Process Overview



Section VI — NERC Organization Certification Appeals Process

Purpose and Scope

This section describes the process for an organization to appeal the certification decision that was determined in the certification process.

Overview

The NERC Organization Certification Program provides a key means to fulfill NERC's mission. In conducting this program, NERC has established documented procedures to ensure 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. See Figure 4 *Organization Certification Appeals Process Overview*.

Organization Certification Appeals Procedure

1. Appeal for an Organization Certification Finding.

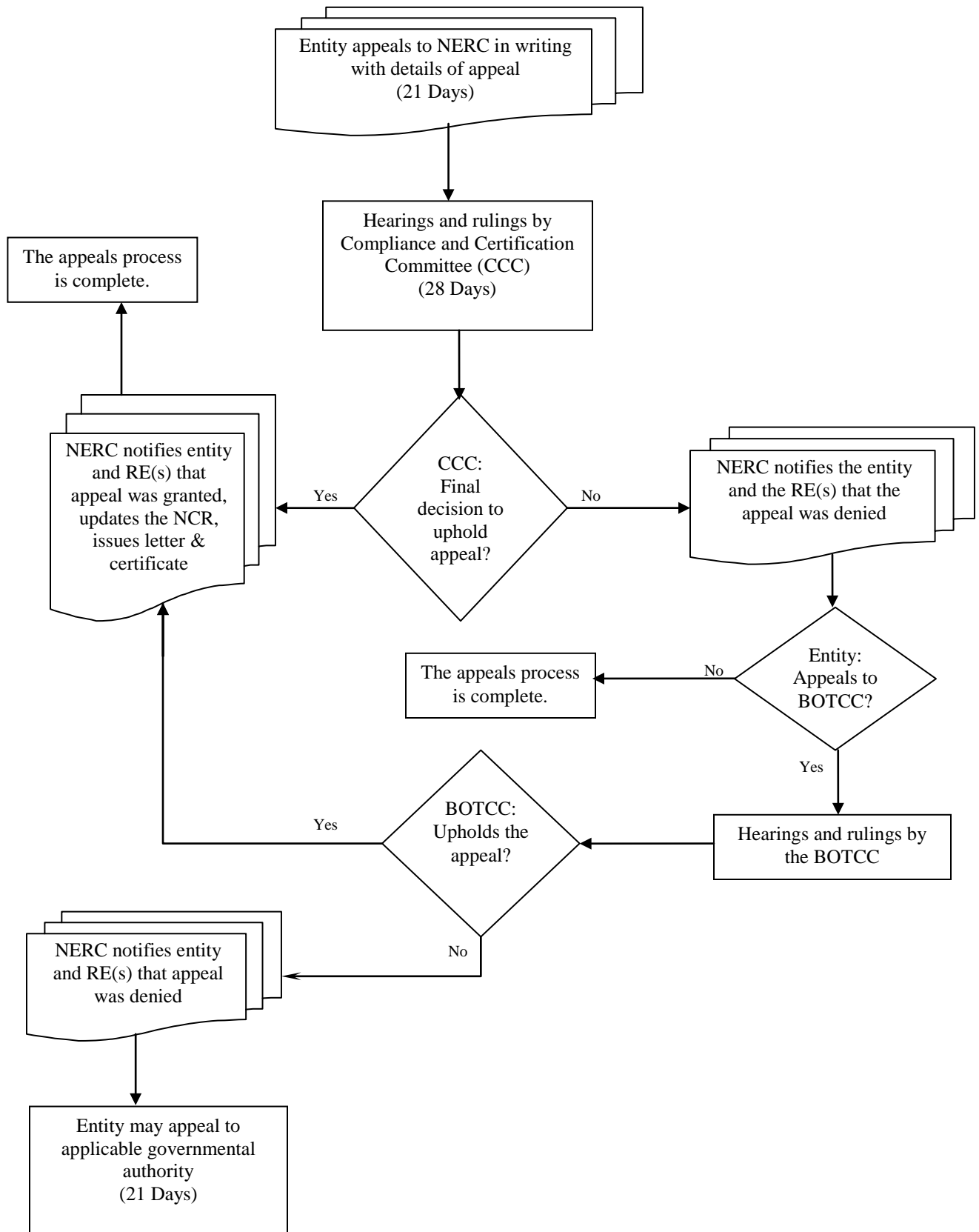
Any entity can appeal an organization certification decision issued as a result of the certification process.

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 and Director of Compliance, in writing, that it wishes to use the NERC appeals process.
 - The Vice President and Director of Compliance is the main contact for all parties in all steps of the appeals process.
 - If an appeal is not filed within twenty one (21) days of the date that the certification report or finding is issued, or the final Regional Entity appeals process ruling is made, the finding shall be considered final and un-appealable.
- 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 Regional Entity or entity requesting the appeal agrees that NERC (its members, Board of Trustees, committees, subcommittees, and staff), any person assisting in the appeals process, and any company employing a person assisting in the appeals process, shall not be liable, and 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 the right to seek further review of a decision in whatever regulatory agency or court that may have jurisdiction.

3. At any time through this appeals process, an entity may withdraw its appeal.
4. Hearing and Ruling by the Compliance and Certification Committee.
 - a. Within twenty-eight (28) days of receiving notice from the NERC Vice President and Director of Compliance, the CCC will conduct a hearing where all the parties or representatives of the disputing parties will present the issue in question, in accordance with CCC procedure CCCPP-005, *Hearing Procedures for Use in Appeals of Certification Matters*.
 - b. If the appeal is upheld, NERC notifies the entity and RE(s), updates the NCR, and issues any appropriate letter and certificate to the entity.
 - c. If the appeal is denied, NERC notifies the entity and RE(s).
5. Hearings and Ruling by the BOTCC.
 - a. The BOTCC will be asked to resolve a dispute related to the NERC Organization Certification Program if any party to the appeal contests the CCC final order.
 - b. The BOTCC may request additional data from NERC, RE(s) or the entity and prescribe the timeframe for the submitting the requested data.
 - c. At the next regularly scheduled BOTCC meeting, or at a special meeting if the Board determines it is necessary, the Chairman of the CCC will present a summary of the dispute and the actions taken to the Board.
 - Each party will have an opportunity to state its case.
 - The BOTCC will then rule on the dispute.
 - d. If the BOTCC upholds the appeal, NERC will:
 - Notify the entity and the Regional Entity(ies) that the appeal was upheld.
 - Update the NCR.
 - Issue a certification letter and a certificate to the entity as applicable.
 - e. If the BOTCC does not uphold the appeal, NERC will notify the entity and the Regional Entity(ies) that the appeal was denied.
 - The entity may appeal to applicable governmental authorities within 21 days of the issuance of the decision.
 - f. A record of the appeals process shall be maintained by NERC and available upon request. Confidentiality of the record of the appeal will be based on the NERC Rules of Procedure Section 1500.

Figure 4: Organization Certification Appeals Process Overview



Definitions

NERC Organization Certification	The process undertaken by NERC and a Regional Entity to verify that a new entity is capable of responsibilities for tasks associated with a particular function such as a Balancing Authority, Transmission Operator, and/or Reliability Coordinator.
Compliance and Certification Manager	The individual/individuals within the Regional Entity that is/are responsible for monitoring compliance of entities applicable NERC Reliability Standards.
Days	Days as used in the registration and certification processes are defined as calendar days.
Footprint	The geographical or electric area served by an entity.
Functional Entity	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.
Mapping	The process of determining whether a Regional Entity's footprint is being served by Registered Entities.
NERC Identification Number (NERC ID)	A number given to NERC Registered Entities that will be used to identify the entity for certain NERC activities. Note: corporate entities may have multiple NERC IDs to show different corporate involvement in NERC activities.
Regional Entity	NERC works with eight Regional Entities to improve the reliability of the bulk power system. The members of the Regional Entities come from all segments of the electric industry. These entities account for virtually all the electricity supplied in the United States, Canada, and a portion of Baja California Norte, Mexico. NERC delegates enforcement authority to these Regional Entities (FRCC, RFC, SPP, TRE, NPCC, MRO, SERC, & WECC).
Registration	Process undertaken by a Regional Entity to identify which entities are responsible for reliability functions within the Regional Entity's footprint.
Coordinated Functional Registration (CFR)	Where two or more entities (parties) agree in writing upon a division of compliance responsibility among the parties for one or more reliability standard(s) applicable to a particular function, and/or for one or more requirement(s)/sub-requirement(s) within particular reliability standard(s).

Appendix 5B - Statement of Compliance Registry Criteria (Revision 5.0)

Summary

Since becoming the Electric Reliability Organization (ERO), NERC has initiated a program to identify candidate organizations for its compliance registry. The program, conducted by NERC and the Regional Entities¹, will also confirm the functions and information now on file for currently-registered organizations. NERC and the Regional Entities have the obligation to identify and register all entities that meet the criteria for inclusion in the compliance registry, as further explained in the balance of this document.

This document describes how NERC will identify organizations that may be candidates for registration and assign them to the compliance registry.

Organizations will be responsible to register and to comply with approved reliability standards to the extent that they are owners, operators, and users of the bulk power system, perform a function listed in the functional types identified in Section II of this document, and are material to the reliable operation of the interconnected bulk power system as defined by the criteria and notes set forth in this document. NERC will apply the following principles to the compliance registry:

- In order to carry out its responsibilities related to enforcement of Reliability Standards, NERC must identify the owners, operators, and users of the bulk power system who have a material impact² on the bulk power system through a compliance registry. NERC and the Regional Entities will make their best efforts to identify all owners, users and operators who have a material reliability impact on the bulk power system in order to develop a complete and current registry list. The registry will be updated as required and maintained on an on-going basis.
- Organizations listed in the compliance registry are responsible and will be monitored for compliance with applicable mandatory reliability standards. They will be subject to NERC's and the Regional Entities' compliance and enforcement programs.
- NERC and Regional Entities will not monitor nor hold those not in the registry responsible for compliance with the standards. An entity which is not initially placed on the registry, but which is identified subsequently as having a material reliability

¹ The term "Regional Entities" includes Cross-Border Regional Entities.

² The criteria for determining whether an entity will be placed on the registry are set forth in the balance of this document. 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, pursuant to NERC ROP 501.1.3.5.

- impact, will be added to the registry. Such entity will not be subject to a sanction or penalty by NERC or the Regional Entity for actions or inactions prior to being placed on the registry, but may be required to comply with a remedial action directive or mitigation plan in order to become compliant with applicable standards. After such entity has been placed on the compliance registry, it shall be responsible for complying with Reliability Standards and may be subject to sanctions or penalties as well as any remedial action directives and mitigation plans required by the Regional Entities or NERC for future violations, including any failure to follow a remedial action directive or mitigation plan to become compliant with Reliability Standards.
- Required compliance by a given organization with the standards will begin the later of (i) inclusion of that organization in the compliance registry and (ii) approval by the appropriate governmental authority of mandatory reliability standards applicable to the entity.

Entities responsible for funding NERC and the Regional Entities have been identified in the budget documents filed with FERC. Presence on or absence from the compliance registry has no bearing on an entity's independent responsibility for funding NERC and the Regional Entities.

Background

In 2005, NERC and the Regional Entities conducted a voluntary organization registration program limited to balancing authorities, planning authorities, regional reliability organizations, reliability coordinators, transmission operators, and transmission planners. The list of the entities that were registered constitutes what NERC considered at that time as its compliance registry.

NERC has recently initiated a broader program to identify additional organizations potentially eligible to be included in the compliance registry and to confirm the information of organizations currently on file. NERC believes this is a prudent activity at this time because:

- As of July 20, 2006, NERC was certified as the ERO created for the U.S. by the Energy Policy Act of 2005 (EPAct) and FERC Order 672. NERC has also filed with Canadian authorities for similar recognition in their respective jurisdictions.
- FERC's Order 672 directs that owners, operators and users of the bulk power system shall be registered with the ERO and the appropriate Regional Entities.
- As the ERO, NERC has filed its current reliability standards with FERC and with Canadian authorities. As accepted and approved by FERC and appropriate Canadian authorities, the reliability standards are no longer voluntary, and organizations that do not fully comply with them may face penalties or other sanctions determined and levied by NERC or the Regional Entities.
- NERC's reliability standards include compliance requirements for additional reliability function types beyond the six types registered by earlier registration programs.

- Based on selection as the ERO, the extension and expansion of NERC's current registration program³ is the means by which NERC and the Regional Entities will plan, manage and execute reliability standard compliance oversight of owners, operators, and users of the bulk power system.
- Organizations listed in the compliance registry are subject to NERC's and the Regional Entities' compliance and enforcement programs.

Statement of Issue

As the ERO, NERC intends to comprehensively and thoroughly protect the reliability of the grid. To support this goal NERC will include in its compliance registry each entity that NERC concludes can materially impact the reliability of the bulk power system. However, the potential costs and effort of ensuring that every organization potentially within the scope of "owner, operator, and user of the bulk power system" becomes registered while ignoring their impact upon reliability, would be disproportionate to the improvement in reliability that would reasonably be anticipated from doing so.

NERC wishes to identify as many organizations as possible that may need to be listed in its compliance registry. Identifying these organizations is necessary and prudent at this time for the purpose of determining resource needs, both at the NERC and Regional Entity level, and to begin the process of communication with these entities regarding their potential responsibilities and obligations. NERC and the Regional Entities believe that primary candidate entities can be identified at this time, while other entities can be identified later, as and when needed. Selection principles and criteria for the identification of these initial entities are required. This list will become the "Initial Non-binding Organization Registration List". With FERC having made the approved Reliability Standards enforceable, this list becomes the NERC Compliance Registry.

Resolution

NERC and the Regional Entities have identified two principles they believe are key to the entity selection process. These are:

1. There needs to be consistency between regions and across the continent with respect to which entities are registered, and;
2. Any entity reasonably deemed material to the reliability of the bulk power system will be registered, irrespective of other considerations.

To address the second principle the Regional Entities, working with NERC, will identify and register any entity they deem material to the reliability of the bulk power system.

In order to promote consistency, NERC and the Regional Entities intend to use the following criteria as the basis for determining whether particular entities should be identified as candidates for registration. All organizations meeting or exceeding the criteria will be identified as candidates.

³ See: NERC ERO Application; Exhibit C; Section 500 – Organization Registration and Certification.

The following four groups of criteria (Sections I-IV) plus the statements in Section V will provide guidance regarding an entity's registration status:

- Section I determines if the entity is an owner, operator, or user of the bulk power system and, hence, a candidate for organization registration.
- Section II uses NERC's current functional type definitions to provide an initial determination of the functional types for which the entities identified in Section I should be considered for registration.
- Section III lists the criteria regarding smaller entities; these criteria can be used to forego the registration of entities that were selected to be considered for registration pursuant to Sections I and II and, if circumstances change, for later removing entities from the registration list that no longer meet the relevant criteria.
- Section IV — additional criteria for joint registration. Joint registration criteria may be used by Joint Action Agencies, Generation and Transmission Cooperatives and other entities which agree upon a clear division of compliance responsibility for Reliability Standards by written agreement. Pursuant to FERC's directive in paragraph 107 of Order No. 693, rules pertaining to joint registration and Joint Registration Organizations will now be found in Sections 501 and 507 of the NERC Rules of Procedure.

- I. Entities that use, own or operate elements of the bulk electric system as established by NERC's approved definition of bulk electric system below are (i) owners, operators, and users of the bulk power system and (ii) candidates for registration:

"As defined by the Regional Reliability Organization, the electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher. Radial transmission facilities serving only load with one transmission source are generally not included in this definition."⁴

- II. Entities identified in Part I above will be categorized as registration candidates who may be subject to registration under one or more appropriate functional entity types based on a comparison of the functions the entity normally performs against the following function type definitions:

Function Type	Acronym	Definition/Discussion
Balancing Authority	BA	The responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a BA area, and supports Interconnection

⁴ However, ownership of radial transmission facilities intended to be covered by the vegetation management standard (applicable to transmission lines 200 kV and above) would be included in this definition.

Function Type	Acronym	Definition/Discussion
		frequency in real-time.
Distribution Provider	DP	Provides and operates the “wires” between the transmission system and the end-use customer. For those end-use customers who are served at transmission voltages, the Transmission Owner also serves as the DP. Thus, the DP is not defined by a specific voltage, but rather as performing the Distribution function at any voltage.
Generator Operator	GOP	The entity that operates generating unit(s) and performs the functions of supplying energy and interconnected operations services.
Generator Owner	GO	Entity that owns and maintains generating units.
Interchange Authority	IA	The responsible entity that authorizes implementation of valid and balanced Interchange Schedules between Balancing Authority Areas, and ensures communication of Interchange information for reliability assessment purposes.
Load-Serving Entity	LSE	Secures energy and transmission service (and related interconnected operations services) to serve the electrical demand and energy requirements of its end-use customers.
Planning Authority	PA	The responsible entity that coordinates and integrates transmission facility and service plans, resource plans, and protection systems.
Purchasing-Selling Entity	PSE	The entity that purchases or sells and takes title to energy, capacity, and interconnected operations services. PSE may be affiliated or unaffiliated merchants and may or may not own generating facilities.
Reliability Coordinator	RC	The entity that is the highest level of authority who is responsible for the reliable operation of the bulk power system, has the wide area view of the bulk power 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-

Function Type	Acronym	Definition/Discussion
		time operations. The RC 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.
Reserve Sharing Group	RSG	A group whose members consist of two or more Balancing Authorities that collectively maintain, allocate, and supply operating reserves required for each BA's use in recovering from contingencies within the group. Scheduling energy from an adjacent BA to aid recovery need not constitute reserve sharing provided the transaction is ramped in over a period the supplying party could reasonably be expected to load generation in (e.g., ten minutes). If the transaction is ramped in quicker, (e.g., between zero and ten minutes) then, for the purposes of disturbance control performance, the areas become a RSG.
Resource Planner	RP	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 PA area.
Transmission Owner	TO	The entity that owns and maintains transmission facilities.
Transmission Operator	TOP	The entity responsible for the reliability of its local transmission system and operates or directs the operations of the transmission facilities.
Transmission Planner	TP	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 PA area.
Transmission Service Provider	TSP	The entity that administers the transmission tariff and provides transmission service to transmission customers under applicable transmission service agreements.

- III. Entities identified in Part II above as being subject to registration as an LSE, DP, GO, GOP, TO, or TOP should be excluded from the registration list for these functions if they do not meet any of the criteria listed below:

III (a) Load-serving Entity:

- III.a.1 Load-serving entity peak load is > 25 MW and is directly connected to the bulk power (>100 kV) system, or;
- III.a.2 Load-serving entity is designated as the responsible entity for facilities that are part of a required underfrequency load shedding (UFLS) program designed, installed, and operated for the protection of the bulk power system, or;
- III.a.3 Load-serving entity is designated as the responsible entity for facilities that are part of a required undervoltage load shedding (UVLS) program designed, installed, and operated for the protection of the bulk power system.

[Exclusion: A load-serving entity will not be registered based on these criteria if responsibilities for compliance with approved NERC reliability standards or associated requirements including reporting have been transferred by written agreement to another entity that has registered for the appropriate function for the transferred responsibilities, such as a load-serving entity, balancing authority, transmission operator, G&T cooperative or joint action agency as described in Sections 501 and 507 of the NERC Rules of Procedure.]

- III.a.4 Distribution providers registered under the criteria in III.b.1 or III.b.2 will be registered as a load serving entity (LSE) for all load directly connected to their distribution facilities.

[Exclusion: A distribution provider will not be registered based on this criterion if responsibilities for compliance with approved NERC reliability standards or associated requirements including reporting have been transferred by written agreement to another entity that has registered for the appropriate function for the transferred responsibilities, such as a load-serving entity, balancing authority, transmission operator, G&T cooperative, or joint action agency as described in Sections 501 and 507 of the NERC Rules of Procedure.]

III(b) Distribution Provider:

- III.b.1 Distribution provider system serving >25 MW of peak load that is directly connected to the bulk power system.

[Exclusion: A distribution provider will not be registered based on this criterion if responsibilities for compliance with approved NERC reliability standards or associated requirements including reporting have been transferred by written agreement to another entity that has registered for the appropriate function for the transferred responsibilities, such as a load-serving entity, balancing authority, transmission operator, G&T cooperative, or joint action agency as described in Sections 501 and 507 of the NERC Rules of Procedure.] or;

- III.b.2 Distribution provider is the responsible entity that owns, controls, or operates facilities that are part of any of the following protection systems or programs designed, installed, and operated for the protection of the bulk power system:

- a required UFLS program.
- a required UVLS program.
- a required special protection system.
- a required transmission protection system.

[Exclusion: A distribution provider will not be registered based on these criteria if responsibilities for compliance with approved NERC reliability standards or associated requirements including reporting have been transferred by written agreement to another entity that has registered for the appropriate function for the transferred responsibilities, such as a load-serving entity, balancing authority, transmission operator, G&T cooperative, or joint action agency as described in Sections 501 and 507 of the NERC Rules of Procedure.]

III(c) Generator Owner/Operator:

- III.c.1 Individual generating unit > 20 MVA (gross nameplate rating) and is directly connected to the bulk power system, or;
- III.c.2 Generating plant/facility > 75 MVA (gross aggregate nameplate rating) or when the entity has responsibility for any facility consisting of one or more units that are connected to the bulk power system at a common bus with total generation above 75 MVA gross nameplate rating, or;
- III.c.3 Any generator, regardless of size, that is a blackstart unit material to and designated as part of a transmission operator entity's restoration plan, or;

- III.c.4 Any generator, regardless of size, that is material to the reliability of the bulk power system.

[Exclusions:

A generator owner/operator will not be registered based on these criteria if responsibilities for compliance with approved NERC reliability standards or associated requirements including reporting have been transferred by written agreement to another entity that has registered for the appropriate function for the transferred responsibilities, such as a load-serving entity, G&T cooperative or joint action agency as described in Sections 501 and 507 of the NERC Rules of Procedure.

As a general matter, a customer-owned or operated generator/generation that serves all or part of retail load with electric energy on the customer's side of the retail meter may be excluded as a candidate for registration based on these criteria if (i) the net capacity provided to the bulk power system does not exceed the criteria above or the Regional Entity otherwise determines the generator is not material to the bulk power system and (ii) standby, back-up and maintenance power services are provided to the generator or to the retail load pursuant to a binding obligation with another generator owner/operator or under terms approved by the local regulatory authority or the Federal Energy Regulatory Commission, as applicable.]

III(d) Transmission Owner/Operator:

- III.d.1 An entity that owns/operates an integrated transmission element associated with the bulk power system 100 kV and above, or lower voltage as defined by the Regional Entity necessary to provide for the reliable operation of the interconnected transmission grid; or
- III.d.2 An entity that owns/operates a transmission element below 100 kV associated with a facility that is included on a critical facilities list that is defined by the Regional Entity.

[Exclusion: A transmission owner/operator will not be registered based on these criteria if responsibilities for compliance with approved NERC reliability standards or associated requirements including reporting have been transferred by written agreement to another entity that has registered for the appropriate function for the transferred responsibilities, such as a load-serving entity, G&T cooperative or joint action agency as described in Sections 501 and 507 of the NERC Rules of Procedure.]

IV. Joint Registration Organization and applicable Member Registration.

Pursuant to FERC's directive in paragraph 107 of Order No. 693, NERC's rules pertaining to joint registrations and Joint Registration Organizations are now found in Section 501 and 507 of the NERC Rules of Procedure.

- V. If NERC or a Regional Entity encounters an organization that is not listed in the compliance registry, but which should be subject to the reliability standards, NERC or the Regional Entity is obligated and will add that organization to the registry, subject to that organization's right to challenge as provided in Section 500 of NERC's Rules of Procedure and as described in Note 3 below.

Notes to the above Criteria

1. The above are general criteria only. The Regional Entity considering registration of an organization not meeting (e.g., smaller in size than) the criteria may propose registration of that organization if the Regional Entity believes and can reasonably demonstrate⁵ that the organization is a bulk power system owner, or operates, or uses bulk power system assets, and is material to the reliability of the bulk power system. Similarly, the Regional Entity may exclude an organization that meets the criteria described above as a candidate for registration if it believes and can reasonably demonstrate to NERC that the bulk power system owner, operator, or user does not have a material impact on the reliability of the bulk power system.
2. An organization not identified using the criteria, but wishing to be registered, may request that it be registered. For further information refer to: NERC Rules of Procedure, Section 500 – Organization Registration and Certification; Part 1.3.
3. An organization may challenge its registration within the compliance registry. NERC or the Regional Entity will provide the organization with all information necessary to timely challenge that determination including notice of the deadline for contesting the determination and the relevant procedures to be followed as described in the NERC Rules of Procedure; Section 500 – Organization Registration and Certification.
4. If an entity is part of a class of entities excluded based on the criteria above as individually being unlikely to have a material impact on the reliability of the bulk power system, but that in aggregate have been demonstrated to have such an impact it may be registered for applicable standards and requirements irrespective of other considerations.

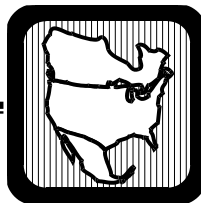
⁵ The reasonableness of any such demonstration will be subject to review and remand by NERC itself, or by any agency having regulatory or statutory oversight of NERC as the ERO (e.g., FERC or appropriate Canadian authorities).

Appendix 6

System Operator Certification Program Manual

August 2006

Approved by the Personnel Certification Governance Committee
Approved by the NERC Board of Trustees
May 2006



North American Electric Reliability Council
Updated: August 14, 2006

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
Total Time to be Allocated	3 hours & 45 minutes

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

Fee Schedule**	
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.

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