

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Reliability Standards Development Procedure

Version 7

to ensure
the reliability of the
bulk power system

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Introduction

Purpose

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

Authority

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

Background

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

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

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

Principles

Need for Guiding Principles

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

Persons and committees that are responsible for the reliability standards process shall consider these principles in the execution of those duties. The reliability and market interface principles are listed in Appendix A in the Standard Authorization Request template.

Reliability Principles

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

Market Interface Principles

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

Reliability Standard Definition, Characteristics, and Elements

Definition of a Reliability Standard

A reliability standard defines certain obligations or requirements of entities that operate, plan, and use the bulk power systems of North America. The obligations or requirements must be material to reliability and measurable. Each obligation and requirement shall support one or more of the stated reliability principles and shall be consistent with all of the stated reliability and market interface principles. A reliability standard is defined as follows:

“Reliability standard” means a requirement to provide for reliable operation of the bulk power system, including without limiting the foregoing, requirements for the operation of existing bulk power system facilities, including cyber security protection, and including the design of planned additions or modifications to such facilities to the extent necessary for reliable operation of the bulk power system; but shall not include any requirement to enlarge bulk power system facilities or to construct new transmission capacity or generation capacity¹.

Characteristics of a Reliability Standard

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

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

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

Elements of a Reliability Standard

A reliability standard shall consist of the elements shown in the reliability standard template. These elements are intended to apply a systematic discipline in the development and revision of reliability standards. This discipline is necessary to achieving standards that are measurable, enforceable, and

¹ § 39.1 Code of Federal Regulations.

consistent. The format allows a clear statement of the purpose, requirements, measures, and compliance elements associated with each standard.

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

Performance Elements of a Reliability Standard

Identification Number	A unique identification number assigned in accordance with a published classification system to facilitate tracking and reference to the standards.
Title	A brief, descriptive phrase identifying the topic of the standard.
Applicability	Clear identification of the functional classes of entities responsible for complying with the standard, noting any specific additions or exceptions. If not applicable to the entire North American bulk power system, then a clear identification of the portion of the bulk power system to which the standard applies, such as a region or interconnection. Any limitation on the applicability of the standard based on electric facility requirements should be described.
Effective Date and Status	The effective date of the standard or, prior to approval of the standard by regulatory authorities, the proposed effective date. The status of the standard will be indicated as active or by reference to one of the numbered steps in the standards process.
Purpose	The purpose of the standard. The purpose shall explicitly state what outcome will be achieved by the adoption of the standard. The purpose is agreed to early in the process as a step toward obtaining approval to proceed with the development of the standard. The purpose should link the standard to the relevant principle(s).
Requirement(s)	Explicitly stated technical, performance, preparedness, or certification requirements. Each requirement identifies who is responsible and what action is to be performed or what outcome is to be achieved. Each statement in the requirements section shall be a statement for which compliance is mandatory. Any additional comments or statements for which compliance is not mandatory, such as background or explanatory information should be placed in a separate document and referenced. (See Supporting References.)
Risk Factors	The potential reliability significance of each requirement, designated as a High, Medium, or Lower Risk Factor in accordance with the criteria listed below: A High Risk Factor requirement (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a

	<p>normal condition.</p> <p>A Medium Risk Factor requirement (a) is a requirement that, if violated, could directly affect the electrical state or the capability of the bulk power system, or the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.</p> <p>A Lower Risk Factor requirement is administrative in nature and (a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or (b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.</p>
<p>Measure(s)</p>	<p>Each requirement shall be addressed by one or more measures. Measures are used to assess performance and outcomes for the purpose of determining compliance with the requirements stated above. Each measure will identify to whom the measure applies and the expected level of performance or outcomes required to demonstrate compliance. Each measure shall be tangible, practical, and as objective as is practical. It is important to realize that measures are proxies to assess required performance or outcomes. Achieving the measure should be a necessary and sufficient indicator that the requirement was met. Each measure shall clearly refer to the requirement(s) to which it applies.</p>

Glossary of Terms Used in Standards

<p>Definitions of Terms</p>	<p>All defined terms used in reliability standards shall be defined in the glossary. Definitions may be approved as part of a standard action or as a separate action. All definitions must be approved in accordance with the standards process.</p>
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Compliance Elements² of a Standard

The following compliance elements, are developed for each standard by the standard drafting team and are balloted with the standard:

² While the compliance elements of a standard are developed for each NERC standard, the compliance elements will not be included in any standard submitted to ANSI for approval as an American National Standard.

Compliance Monitoring Process	<p>Compliance Enforcement Authority: The entity that is responsible for evaluating data or information to assess performance or outcomes.</p> <p>Compliance Monitoring and Enforcement Processes: The processes that will be used to evaluate data or information for the purpose of assessing performance or outcomes.</p> <p>Data Retention: Measurement data retention requirements and assignment of responsibility for data archiving.</p> <p>Additional Compliance Information: Any other information related to assessing compliance such as the criteria or periodicity for filing specific reports.</p>
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The following compliance elements are developed by the standard drafting team, working with NERC staff, but are not considered to be part of the standard. These elements will be posted for stakeholder comment concurrent with the associated requirements as early in the standard development process as possible. The standard drafting team, working with NERC staff will respond to all comments received. The drafting team, working with NERC staff may make modifications to the VRFs and VSLs based on stakeholder comments.

A non-binding poll will be conducted to assess stakeholders' agreement with VRFs and VSLs. If stakeholder comments submitted with the non-binding poll indicate specific improvements that would improve consensus, then the SDT, working with NERC staff, will revise the VRFs and VSLs to reflect stakeholder comments.

The Standards Committee will report the results of the poll and a summary of industry comments received on the final posting of the proposed VRFs and VSLs to the Board of Trustees. NERC staff will develop for board approval recommended assignments of VRFs and VSLs associated with Reliability Standards being presented for adoption by the board. In developing the recommended VRF and VSL assignments, NERC staff will take into consideration 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, regulatory directives, and VRF and VSL assignments for other Reliability Standards to ensure consistency and relevance across the entire spectrum of Reliability Standards.

The Board of Trustees has the authority to approve Violation Risk Factors and Violation Severity Levels.

<p>Violation Risk Factors</p>	<p>The potential reliability significance of each requirement, designated as a High, Medium, or Lower Risk Factor in accordance with the criteria listed below:</p> <p>A High Risk Factor requirement (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.</p> <p>A Medium Risk Factor requirement (a) is a requirement that, if violated, could directly affect the electrical state or the capability of the bulk power system, or the ability to effectively monitor and control the bulk power system, but is unlikely to lead to bulk power system instability, separation, or cascading failures; or (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system, but is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to bulk power system instability, separation, or cascading failures, nor to hinder restoration to a normal condition.</p> <p>A Lower Risk Factor requirement is administrative in nature and (a) is a requirement that, if violated, would not be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor and control the bulk power system; or (b) is a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to affect the electrical state or capability of the bulk power system, or the ability to effectively monitor, control, or restore the bulk power system.</p>
<p>Violation Severity Levels (VSLs)</p>	<p>Defines the degree to which compliance with a requirement was not achieved. Each requirement must 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</p>

	<p>VSLs.</p> <p>Lower Violation Severity Level:</p> <ul style="list-style-type: none"> • Missing a minor element (or a small percentage) of the required performance <p>Moderate Violation Severity Level:</p> <ul style="list-style-type: none"> • Missing at least one significant element (or a moderate percentage) of the required performance. <p>High Violation Severity Level:</p> <ul style="list-style-type: none"> • Missing more than one significant element (or is missing a high percentage) of the required performance or is missing a single vital component. <p>Severe Violation Severity Level:</p> <ul style="list-style-type: none"> • Missing most or all of the significant elements (or a significant percentage) of the required performance.
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Supporting Information Elements

Interpretations	Formally approved interpretations of the reliability standard. Interpretations are temporary, as the standard should be revised to incorporate the interpretation. Interpretations are developed and approved through a process described in the section Interpretations of Standards.
Implementation Plan	Each standard shall have an associated implementation plan describing the effective date of the standard or effective dates if there is a phased implementation. The implementation plan may also describe the implementation of the standard in the compliance program and other considerations in the initial use of the standard, such as necessary tools, training, etc. The implementation plan must be posted for at least one public comment period and is approved as part of the ballot of the standard.
Supporting References	<p>This section will reference related documents that support implementation of the reliability standard, but are not themselves mandatory. Examples include, but are not limited to:</p> <ul style="list-style-type: none"> • Developmental history of the standard and prior versions. • Notes pertaining to implementation or compliance. • Standard references. • Standard supplements. • Procedures. • Practices. • Training references. • Technical references. • White papers. • Internet links to related information.

Roles in the Reliability Standards Development Process

Nomination, Revision, or Withdrawal of a Standard

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

Process Roles

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

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

Standards Committee — The Standards Committee shall consist of two members of each of the stakeholder segments in the Registered Ballot Body³. The Standards Committee shall meet at regularly scheduled intervals (either in person, or by other means) to consider which requests for new or revised standards should be assigned for development. The Standards Committee will manage the standards development process. The responsibilities of the Standards Committee will include: management of the standards work flow so as not to overwhelm available resources; review of standards authorization requests and draft standards for such factors as completeness, sufficient detail, rational result, and compatibility with existing standards; clarifying standard development issues not specified in this procedure; and advising the Board of Trustees on standard development matters. Under no circumstance will the Standards Committee change the substance of a draft standard. The standards process manager serves as secretary to the Standards Committee.

Registered Ballot Body — The Registered Ballot Body comprises all entities or individuals that:

1. Qualify for one of the stakeholder segments approved by the Board of Trustees⁴, and
2. Are registered with NERC as potential ballot participants in the voting on standards, and
3. Are current with any designated fees.

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

³ 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.

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

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

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

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

Standards Process Staff — NERC staff will assist the SAR drafting teams and standard drafting teams.

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

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

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

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

Compliance Enforcement Program — The mission of the NERC compliance enforcement program is to manage and enforce compliance with NERC reliability standards. The development of a reliability standard, in particular the measures and compliance elements, shall have direct input from the compliance

enforcement program. Field testing will also be coordinated with the compliance program. The compliance program director and appropriate working groups shall provide inputs and comments during the standards development process to ensure the measures will be effective and other aspects of the compliance enforcement program can be practically implemented. **SAR Drafting Team** — A team of technical experts assigned by the Standards Committee, that:

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

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

- Develops the details of the standard, and works with NERC staff in developing VRFs, and VSLs
- Considers and responds to comments, and
- Participates in industry forums to help build consensus on posted draft standards.

Reliability Standards Consensus Development Process

Overview

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

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

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

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

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

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

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

Requests to develop, revise, or withdraw⁵ a reliability standard shall be submitted to the standards process manager by completing a SAR. The SAR is a description of the new or revised standard. The SAR provides sufficiently descriptive detail to clearly define the scope of the standard. The SAR also states the purpose of the standard. A needs statement will provide the detailed justification for the development or revision of the standard, including an assessment of the reliability and market interface impacts of implementing or not implementing the standard. Appendix A provides a sample of the information in a SAR. The standards process manager shall maintain this form and make it available electronically.

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

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

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

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

⁵ Actions in the remaining steps of the standards process apply to proposed new standards, revisions to existing standards, or withdrawal of existing standards, unless explicitly stated otherwise.

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

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

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

Step 2 — Solicit Public Comments on the SAR

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

***Sequence Considerations:** A SAR may be posted only after completion of Step 1. A SAR may, at the discretion of the Standards Committee, be posted for comment concurrently with a draft standard (Step*

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

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

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

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

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

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

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

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

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

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

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

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

- Authorize drafting the proposed standard or revisions to a standard.
- Reject the SAR with a written explanation to the requester and post that explanation.

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

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

Step 4 — Appoint Standard Drafting Team

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

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

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

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

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

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

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

Step 5 — Draft New or Revised Standard

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

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

The appointed standard drafting team will develop a draft of the standard. In addition to drafting the text of the standard, development may include research, analysis, information gathering, testing, and other activities. The drafting of Violation Risk Factors and Violation Severity Levels will be coordinated with NERC staff.

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

Once the standard has been drafted, the standards process manager will review the standard for consistency of quality and completeness. The standards process manager will also ensure the draft standard is within the scope and purpose identified in the SAR. This review should occur within a 30-day period of the submittal of the draft standard. Once the standards process manager has completed this review, the new or revised standard will be submitted to the Standards Committee to request posting for public comment.

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

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

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

Step 6 — Solicit Public Comments on Draft Standard, VRFs, and VSLs

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

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

Once the Standards Committee approves the posting of a draft standard and sets the posting start and end dates, the standards process manager will post the draft standard in the next regular posting interval for the purpose of soliciting public comments. The posting of the draft standard will be linked to the SAR for reference. Comments on the draft standard will be accepted for at least one 45-day period from the notice of posting. Additional posting periods may be set by the Standards Committee and shall be at least 30 days. The posting of draft VRFs and VSLs for stakeholder comment can be deferred until a second or later posting of the draft standard as determined by the standard drafting team; however, it is recommended that the VRFs and VSLs be posted for comment with the entire draft Reliability Standard as early in the standard development process as possible.

Comments will be accepted online using an internet-based application along with other electronic means as necessary.

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

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

Step 7 — Field Testing

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

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

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

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

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

Step 8 — Analysis of the Comments and Field Test Results

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

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

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

Based on comments received, the standard drafting team may determine there is an opportunity to improve consensus for the standard. In this case, the standard drafting team may elect to return to Step 5 and revise the draft for another posting. Although there is no predetermined limit on the number of times a draft standard may be revised and posted, the standard drafting team should ensure the potential benefits of another posting outweigh the burden on the drafting team and stakeholders. Returning to Step 5 to continue working on the standard is the prerogative of the standard drafting team, subject to Standards Committee oversight. If the comments received indicate that the violation risk factors or violation severity levels should be changed to better conform to the criteria for establishing those elements, then the standards drafting team, working with NERC staff, may make revisions.

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

When the Standards Committee receives a draft standard that is recommended for ballot, the Standards Committee will review the standard and recommendations of the standards process manager to ensure that the proposed standard is consistent with the scope of the SAR; addresses all of the objectives and requirements cited in Steps 1 to 8, as applicable; has an implementation plan; and is compatible with other existing standards. If the proposed standard does not pass this review, the Standards Committee shall remand the proposed standard to the standard drafting team to address the deficiencies. If the proposed standard passes the review, the Standards Committee shall set the proposed standard for ballot as soon as the work flow will accommodate.

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

Step 9 — Ballot the New or Revised Standard

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

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

Ballot Pool

The standards process manager shall establish a ballot pool for a standard action at least 30 days prior to the start of a ballot. The standards process manager shall send a notice to every entity in the Registered Ballot Body. The purpose of this notice is to establish a ballot pool to participate in the consensus development process and participate in the ballot for the proposed standards action as well as the poll for the violation risk factors and violation severity levels. The ballot pool may be established earlier in the standards development process to encourage active participation in the development process.

Any member of the Registered Ballot Body may join or drop out of a ballot pool until the ballot period begins (Step 9). No Registered Ballot Body member may join or leave the ballot pool once the first ballot starts, including between the first ballot and a recirculation ballot. The standards process manager shall coordinate changes to the membership of the ballot pool and publicly post the standard ballot pool for each standard action.

First Ballot

If a decision is made to submit the draft standard to a vote, the draft standard, all comments received, and the responses to those comments shall be posted electronically to the ballot pool and noticed at least 30 days prior to the start of the ballot. The proposed violation risk factors and violation severity levels will be posted at the same time.

Each member of the Registered Ballot Body will be allowed the opportunity to join a single ballot pool to participate in the determination of the approval of the standard and to provide input to the “non-binding poll” on the violation risk factors and violation severity levels associated with the standard.

The ballot will be conducted electronically. Each standard has its own ballot pool and all members of the ballot pool shall be eligible to vote on the associated standard and to provide input to the non-binding poll of the violation risk factors and violation severity levels. The time window for voting will be designated when the draft standard is posted to the ballot pool. In no case will the voting time window start sooner than 30 days from the notice of the posting to the ballot pool. Typically, the voting time window will be a period of ten days. This provides a minimum of 40 days from the initial notice until the end of the voting period.

Approval of a reliability standard or revision to a reliability standard requires both:

- A quorum, which is established by at least 75% of the members of the ballot pool submitting a response with an affirmative vote, a negative vote, or an abstention⁶; and
- A two-thirds majority of the weighted segment votes cast must be affirmative. The number of votes cast is the sum of affirmative and negative votes, excluding abstentions and non-responses.

The “poll” taken on the violation risk factors and violation severity levels is “non-binding.” The results of this poll will be reported to the Board of Trustees and considered by NERC staff in forming its recommendations. The results of the poll are one element for the Board of Trustees to consider when making a determination of whether to approve the compliance elements of the standards. The results of

⁶ If a quorum of the ballot pool is not established, the standard will be balloted a second time, allowing a 15-business day period for the ballot. Should a quorum not be established with the second ballot, the standards process manager would re-survey the Registered Ballot Body to establish interest in participating in a ballot on the standard in accordance with the procedures for ballot pool formation. A re-ballot of the standard will take place with the revised standard ballot pool.

the poll do not determine whether these compliance elements are “approved.” In addition, if stakeholder comments submitted with the non-binding poll indicate specific improvements that would improve consensus, then the SDT, working with NERC staff, will revise the VRFs and VSLs to reflect stakeholder comments before the VRFs and VSLs are submitted to the Board of Trustees.

The following process is used to determine if there are sufficient affirmative votes. (See Appendix C, “Examples of Weighted Segment Voting Calculation.”):

- The number of affirmative votes cast in each segment will be divided by the sum of affirmative and negative votes cast to determine the fractional affirmative vote for each segment. Abstentions and non-responses will not be counted for the purposes of determining the fractional affirmative vote for a segment.
- If there are less than ten entities that vote in a segment, the vote weight of that segment shall be proportionally reduced. Each voter within that segment voting affirmative or negative shall receive a weight of 10% of the segment vote. For segments with ten or more voters, the regular voting procedure would prevail.
- The sum of the fractional affirmative votes from all segments divided by the number of segments voting⁷ will be used to determine if a two-thirds majority has been achieved. (A segment will be considered as “voting” if any member of the segment in the ballot pool casts either an affirmative or a negative vote.)
- A standard will be approved if the sum of fractional affirmative votes from all segments divided by the number of voting segments is greater than two thirds.

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

- Affirmative
- Affirmative, with comment
- Negative, with or without reasons (the reasons for a negative vote may be given and if possible should include specific wording or actions that would resolve the objection)
- Abstain

Members of the ballot pool should submit any comments on the proposed standard during the public comment period. If any comments are received during the ballot period, they shall be addressed in accordance with Step 8 and included with the recirculation ballot. The standards process manager shall facilitate the standard drafting team, assisted by the requester, in preparing a response to all votes submitted with reasons. The member submitting a vote with reasons will determine if the response provided satisfies those reasons. In addition, each objector shall be informed that an appeals process exists within the NERC standards process. A negative vote that does not contain a statement of reason does not require a response.

If there are no negative votes with reasons from the first ballot, then the results of the first ballot shall stand. If, however, one or more members submit negative votes with reasons, regardless whether those reasons are resolved or not, a second ballot shall be conducted.

⁷ 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.

Second Ballot

In the second ballot (also called a “recirculation ballot”), members of the ballot pool shall again be presented the proposed standard (unchanged from the first ballot) along with the reasons for negative votes, the responses, and any resolution of the differences. All members of the ballot pool shall be permitted to reconsider and change their vote from the first ballot. Members of the ballot pool that did not respond to the first ballot shall be permitted to vote in the second ballot. In the second ballot, votes will be counted by exception only — members on the second ballot may indicate a revision to their original vote; otherwise their vote shall remain the same as in the first ballot. If a second ballot is conducted, the results of the second ballot shall determine the status of the standard, regardless of the outcome of the first ballot.

The voting time window for the second ballot is once again ten days. The 30-day posting is not required for the second ballot. Members of the ballot pool may submit comments in the second ballot but no response is required.

In the second ballot step, no revisions to the standard are permitted; as such revisions would not have been subject to public comment. However, if the Standards Committee determines that revisions proposed during the ballot process would likely provide an opportunity to achieve consensus on the standard, then such revisions may be made and the draft standard posted for public comment again beginning with Step 6 and continuing with subsequent steps.

The standards process manager shall post the final outcome of the ballot process. If the standard is rejected, the process is ended and any further work in this area would require a new SAR. If the standard is approved, the consensus standard will be posted and presented to the Board of Trustees for adoption by NERC.

Step 10 — Adoption of the Reliability Standard by the Board and Approval of Violation Risk Factors and Violation Severity Levels

***Objective:** To have the Board of Trustees adopt the standard as a NERC standard, adopt the associated implementation plan, and approve the associated Violation Risk Factors and Violation Severity Levels.*

***Sequence Considerations:** The 30-day notice prior to action by the Board of Trustees may begin concurrently with or any time after the start of the first ballot. The 30-day period shall not end any sooner than the end of the final ballot.*

A reliability standard submitted for adoption by the Board of Trustees must be publicly posted and noticed at least 30 days prior to action by the Board of Trustees. At a regular or special meeting, the Board of Trustees shall consider adoption of the proposed reliability standard. The board shall consider the results of the balloting and dissenting opinions. The board shall consider any advice offered by the NERC Member Representatives Committee. The board shall adopt or reject a standard, but may not modify a proposed reliability standard. If the board chooses not to adopt a standard, it shall provide its reasons for not doing so.

Separately, the board shall consider approval of the violation risk factors and violation severity levels 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.

Once the board has approved a reliability standard and the associated violation risk factors and violation severity levels, the board will direct NERC staff to file the standard and its associated compliance elements, with applicable governmental authorities in the United States, Canada, and Mexico for approval.

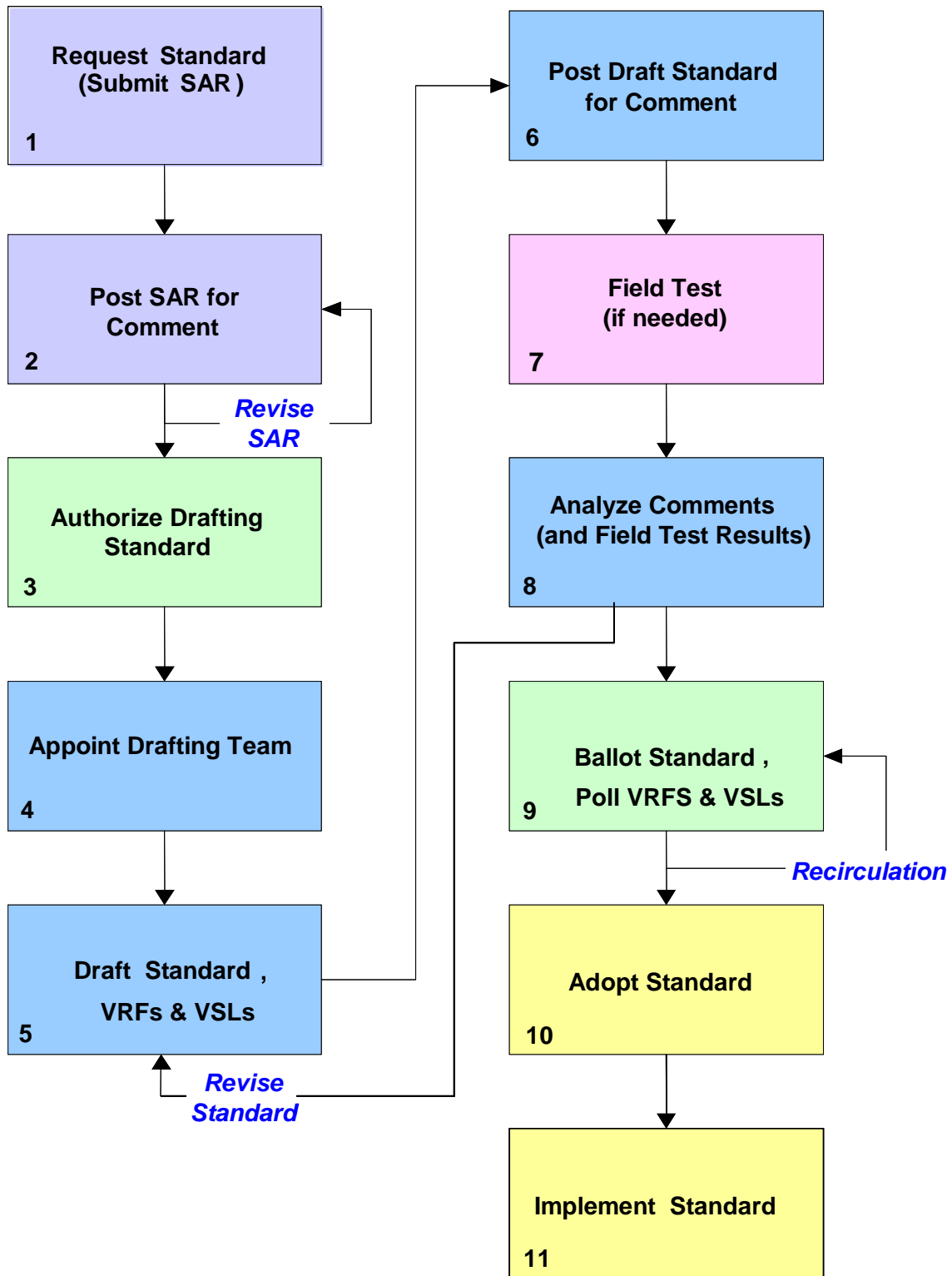
Step 11 — Implementation of Reliability Standard

***Objective:** Industry stakeholders use the standard and the compliance program incorporates the standard into its compliance monitoring and enforcement.*

***Sequence Considerations:** The effective date of a standard is defined in the standard implementation plan.*

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

Process Diagram



Special Procedures

Standards to Support Issues that are Confidential

If the board directs the development of a reliability standard in response to a national security emergency situation that is deemed confidential and it is determined that information can only be shared on a “need to know” basis, NERC will use the entire standards development procedure, but will limit industry participation and the amount of information released without degrading the integrity of the process.

If it needs to develop a reliability standard to address a confidential issue, NERC will follow its normal standards development process with the following exceptions:

- The standard drafting team will develop both a SAR and a standard
- The standard drafting team nomination 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.
- The standard drafting team will perform all its work under strict security and confidentiality rules.
- The standard drafting team will 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.
- The draft standard will be distributed for comment, under strict confidentiality rules, only to those entities that will be expected to comply and who have identified individuals from their organizations that have signed confidentiality agreements with NERC.⁸
- The standard drafting team shall not post or provide the ballot pool with any confidential background information.
- If a standard is approved by its ballot pool, the team will present the proposed standard to the NERC board for approval in a special closed session, either in person or by conference call. (The closed session will allow the team to present not only the standard, but also the confidential information supporting its need.)
- All remaining steps of the standards process will be followed.

Urgent Actions

Under certain conditions, the Standards Committee may designate a proposed standard or revision to a standard as requiring urgent action. Urgent action may be appropriate when a delay in implementing a proposed standard or revision can materially impact the reliability or security of the bulk power systems or be inconsistent with statutory or regulatory requirements for reliability standards, such as by causing adverse impacts on markets or undue discrimination. The Standards Committee must use its judgment

⁸ In this phase of the process, only the proposed standard will 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, will have access to this rationale and justification.

carefully to ensure an urgent action is truly necessary and not simply an expedient way to change or implement a standard.

A requester prepares a SAR and a draft of the proposed standard and submits both to the standards process manager. The SAR must include a justification for urgent action. The standards process manager submits the request to the Standards Committee for its consideration. If the Standards Committee designates the requested standard or revision as an urgent action item, then the standards process manager shall immediately seek participants for a ballot pool (as described in Step 3 of the process) and shall post the pre-ballot draft. This posting requires a minimum 30-day posting period before the ballot and applies the same voting procedure as described in Step 9.

Emergency Actions

The board may direct the immediate development of a new or revised reliability standard to address a national security emergency situation. 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 an imminent national security threat to the reliability of the bulk power system⁹.

Emergency Action Process for Standards Responsive to Imminent Non-confidential Issues

If the board directs the immediate development of a new or revised reliability standard to address a non-confidential national security emergency situation, NERC staff will assemble a slate of subject matter experts as a proposed drafting team for approval by the Standards Committee's Officers. The team, once appointed by the Standards Committee's Officers, will prepare a SAR and a draft of the proposed standard at the same time. All work of the drafting team is open to all interested parties and all documents will be publicly posted.

The standards process manager will form a ballot pool (as described in Step 9 of the process) and will post the proposed standard as soon as it is prepared.

Depending upon the level of urgency, the Standards Committee's Officers may authorize reducing or eliminating the 30-day pre-ballot posting, and may reduce the duration of both the initial ballot and the recirculation ballot to as few as 5 days.

Emergency Action Process for Standards Responsive to Imminent Issues that are Confidential

If the board directs the immediate development of a new or revised reliability standard to address a confidential national security emergency situation, NERC staff will assemble a slate of pre-defined subject matter experts as a proposed drafting team for approval by the Standards Committee's Officers.

- 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.

⁹ The NERC board will 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 will perform all its work under strict security and confidential rules.
- The standard drafting team will develop both a SAR and a standard
- The standard drafting team will 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.
- The standard drafting team shall not post or provide the ballot pool with any confidential background information.
- The standards process manager will form a ballot pool (as described in Step 9 of the process) and will post the proposed standard as soon as it is prepared.
- Depending upon the level of urgency, the Standards Committee's Officers may authorize reducing or eliminating the 30-day pre-ballot posting, and may reduce the duration of both the initial ballot and the recirculation ballots to as few as 5 days.

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

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

Interpretations of Standards

All persons who are directly and materially affected by the reliability of the North American bulk power systems shall be permitted to request an interpretation of the standard. The person requesting an interpretation will send a request to the standards process manager explaining the specific circumstances surrounding the request and what clarifications are required as applied to those circumstances. The request should indicate the material impact to the requesting party or others caused by the lack of clarity or a possibly incorrect interpretation of the standard.

The standards process manager will assemble a team with the relevant expertise to address the clarification. The standards process manager shall also form a ballot pool.

As soon as practical (not more than 45 days), the team will draft a written interpretation to the standard addressing the issues raised. Balloting shall take place as described in Step 9 of this procedure. If approved, the interpretation is appended to the standard and shall be filed with the applicable regulatory authorities and becomes effective when approved by those regulatory authorities. The interpretation will stand until such time as the standard is revised through the normal process, at which time the standard will be modified to incorporate the clarifications provided by the interpretation.

Variations to NERC Reliability Standards

Regional reliability organizations, regional entities, regional transmission organizations, market operators and other bulk power system owners, operators, and users may have valid justification to request approval for a variance from a NERC reliability standard. For example, there may be a need for a variance based on a physical difference in the bulk power system.

All variances from NERC reliability standards that are approved by NERC shall be made part of NERC reliability standards. No variances shall be permitted without approval of NERC. No regional entity or bulk power system owner, operator, or user shall claim an exemption to a NERC reliability standard without approval of such a variance through the applicable procedure described below:

- **Entity Variance** — Any variance from a NERC reliability standard that is proposed to apply to one entity or a subset of entities within a limited portion of a regional entity, such as a variance that would apply to a regional transmission organization or particular market or to a subset of bulk power system owners, operators, or users, shall be approved through the regular standards development process defined in the NERC *Reliability Standards Development Procedure* and shall be made part of the applicable NERC reliability standard.
- **Regional Variance Less Than an Interconnection** — Any regional variance from a NERC reliability standard that is proposed to apply for a regional entity, but not for an interconnection, shall be approved through the NERC *Reliability Standards Development Procedure*, except that only members of the registered ballot body located in the affected interconnection shall be permitted to vote; and the variance shall be made part of the applicable NERC reliability standard.
- **Regional Variance on an Interconnection-wide Basis** — An interconnection-wide regional variance from a NERC reliability standard that is determined by NERC to be just, reasonable, and not unduly discriminatory or preferential, and in the public interest, and consistent with other applicable standards of governmental authorities shall be made part of the NERC reliability standard. NERC shall rebuttably presume that a regional variance from a NERC reliability standard that is developed, in accordance with a procedure approved by NERC, by a regional entity organized on an interconnection-wide basis, is just, reasonable, and not unduly discriminatory or preferential, and in the public interest.

Variances should be identified and considered when a SAR is posted for comment. Variances should also be considered in the drafting of a standard, with the intent to make any necessary variances a part of the initial development of a standard. The public posting allows for all impacted parties to identify the requirements of a NERC reliability standard that might require a variance.

Appeals

Persons who have directly and materially affected interests and who have been or will be adversely affected by any substantive or procedural action or inaction related to the development, approval, revision, reaffirmation, or withdrawal of a reliability standard shall have the right to appeal. This appeals process applies only to the NERC reliability standards process as defined in this procedure.

The burden of proof to show adverse effect shall be on the appellant. Appeals shall be made within 30 days of the date of the action purported to cause the adverse effect, except appeals for inaction, which

may be made at any time. In all cases, the request for appeal must be made prior to the next step in the process.

The final decisions of any appeal shall be documented in writing and made public.

The appeals process provides two levels, with the goal of expeditiously resolving the issue to the satisfaction of the participants:

Level 1 Appeal

Level 1 is the required first step in the appeals process. The appellant submits to the standards process manager a complaint in writing that describes the substantive or procedural action or inaction associated with a reliability standard or the standards process. The appellant describes in the complaint the actual or potential adverse impact to the appellant. Assisted by any necessary staff and committee resources, the standards process manager shall prepare a written response addressed to the appellant as soon as practical but not more than 45 days after receipt of the complaint. If the appellant accepts the response as a satisfactory resolution of the issue, both the complaint and response will be made a part of the public record associated with the standard.

Level 2 Appeal

If after the Level 1 Appeal the appellant remains unsatisfied with the resolution, as indicated by the appellant in writing to the standards process manager, the standards process manager shall convene a Level 2 Appeals Panel. This panel shall consist of five members total appointed by the Board of Trustees. In all cases, Level 2 Appeals Panel members shall have no direct affiliation with the participants in the appeal.

The standards process manager shall post the complaint and other relevant materials and provide at least 30 days notice of the meeting of the Level 2 Appeals Panel. In addition to the appellant, any person that is directly and materially affected by the substantive or procedural action or inaction referenced in the complaint shall be heard by the panel. The panel shall not consider any expansion of the scope of the appeal that was not presented in the Level 1 Appeal. The panel may in its decision find for the appellant and remand the issue to the Standards Committee with a statement of the issues and facts in regard to which fair and equitable action was not taken. The panel may find against the appellant with a specific statement of the facts that demonstrate fair and equitable treatment of the appellant and the appellant's objections. The panel may not, however, revise, approve, disapprove, or adopt a reliability standard, as these responsibilities remain with the standard's ballot pool and Board of Trustees respectively. The actions of the Level 2 Appeals Panel shall be publicly posted.

In addition to the foregoing, a procedural objection that has not been resolved may be submitted to the Board of Trustees for consideration at the time the board decides whether to adopt a particular reliability standard. The objection must be in writing, signed by an officer of the objecting entity, and contain a concise statement of the relief requested and a clear demonstration of the facts that justify that relief. The objection must be filed no later than 30 days after the announcement of the vote by the ballot pool on the reliability standard in question.

Maintenance of Reliability Standards and Process

Parliamentary Procedures

Except as required by this procedure or other NERC documents, all meetings conducted as part of the standards process shall be guided by the latest version of Robert's Rules of Order.

Process Revisions

Requests to Revise the Reliability Standards Development Procedure

Any person or entity, including the Standards Committee, may submit a written request to modify the Reliability Standards Development Procedure. The Standards Committee shall oversee the handling of the request. The Standards Committee shall prioritize all requests, merge related requests, and respond to each requester within 90 days. The Standards Committee shall classify each request into one of two types: 1) a procedural/administrative revision, or 2) a change affecting one or more "fundamental tenets" (described later).

Abbreviated Process for Procedural/Administrative Changes

The Standards Committee shall handle all procedural/administrative requests using an abbreviated process described here. The Standards Committee shall post all proposed procedural/administrative revisions to the Reliability Standards Development Procedure for a 30-day public comment period. The Standards Committee shall consider all comments received and modify the proposed revisions as needed. Based on the degree of consensus for the revisions, the Standards Committee may:

- a. Submit the revised procedure directly to the board for adoption;
- b. Submit the revised procedure for ballot pool approval prior to submitting it for board adoption (the regular voting process in the procedure, including a recirculation ballot if needed, would be used and the results of the ballot would be binding on the decision to move the revisions to the board or not);
- c. Propose additional changes and repeat the posting for further comment;
- d. Remand the proposal to the requester for further work; or
- e. Reject the proposal.
- f. The Standards Committee shall post any proposed revisions submitted for board adoption for a period of 30 days prior to board action. The Standards Committee shall submit to the board a description of the basis for the procedure changes, a summary of the comments received, and any minority views expressed in the comment process. The proposed procedure revisions will be effective upon board adoption, or another date designated by the board.

Fundamental Tenets

Certain provisions of the Reliability Standards Development Procedure are considered fundamental tenets and shall be handled using the full approval process described below. These fundamental tenets shall be modifiable only by approval of the Registered Ballot Body as indicated by vote of a ballot pool. These fundamental tenets include the following:

- Purpose (page 5)

- Authority (page 5)
- Definition of a Reliability Standard (page 7)
- Characteristics of a Reliability Standard (page 7)
- Elements of a Reliability Standard (page 7)
- Registered Ballot Body (page 13)
- Ballot Pool (page 14)
- Committees, Subcommittees, Working Groups, and Task Forces (page 14)
- Reliability Standards Consensus Development Process (page 16)
- Step 9 — Ballot the New or Revised Standard (pages 23-26)
- Step 10 — Adoption of the Reliability Standard by the Board (pages 26–27)
- Special Procedures (pages 29-31)
- Variances to NERC Reliability Standards (page 32)
- Criteria for regional variances (page 32)
- Appeals (pages 32–33)
- Process Revisions (pages 34–35)
- Registration Procedures (page 43)
- Segment Qualification Guidelines (pages 43–44)
- Segments (pages 44–45)

Process for Changing Fundamental Tenets

When proceeding with a proposed revision to the Reliability Standards Development Procedure affecting one or more fundamental tenets, the Standards Committee shall use a full approval process. The Standards Committee shall post the proposed revisions for a 45-day public comment period. Based on the degree of consensus for the revisions, the Standards Committee may:

- a. Submit the revised procedure for ballot pool approval;
- b. Repeat the posting for additional inputs after making changes based on comments received;
- c. Remand the proposal to the requester for further work; or
- d. Reject the proposal.

The Registered Ballot Body shall be represented by a ballot pool. The ballot procedure shall be the same as that defined for approval of a standard, including the use of a recirculation ballot if needed. If the proposed revision is approved by the ballot pool, the Standards Committee shall submit the revised procedure to the board for adoption. The Standards Committee shall post any proposed revisions submitted for board adoption for a period of 30 days prior to board action. The Standards Committee shall submit to the board a description of the basis for the procedure changes, a summary of the comments received, and any minority views expressed in the comment and ballot process. The proposed procedure revisions will be effective upon board adoption, or another date designated by the board.

The Board of Trustees endorsed the industry segments and weighted segment voting model described in Appendix B of the Reliability Standards Development Procedure and reserves the right to change the segments and the weighted segment voting model from time to time at its discretion. This does not preclude others from requesting a change to the segments or weighted segment voting model through the process described here.

Appeals

Persons who have directly or materially affected interests and who have been or will be adversely affected by any substantive or procedural action or inaction related to revision of the Reliability Standards Development Procedure shall have the right to appeal, using the process described under appeals.

Standards Process Accreditation

NERC shall seek continuing ANSI accreditation of the standards process defined by this procedure. The standards process manager shall be responsible for administering the accreditation application and maintenance process. NERC staff shall submit revisions to the Reliability Standards Development Procedure to ANSI as needed to maintain NERC's status as an ANSI-accredited standards developer.

Five-Year Review

Each reliability standard shall be reviewed at least once every five years from the effective date of the standard or the latest revision to the standard, whichever is later. The standard process manager shall recommend to the Standards Committee a schedule and plan for the five-year review of reliability standards.

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

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

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

Online Standards Information System

The standards process manager shall be responsible for maintaining an electronic database of information regarding currently proposed and currently in effect reliability standards. This information shall include current standards in effect, proposed revisions to standards, and proposed new standards. This

information shall provide a record, for at a minimum the previous five years, of the review and approval process for each reliability standard, including public comments received during the development and approval process. This information shall be available through public internet access.

Archived Standards Information

The standards process manager shall be responsible for maintaining a historical record of reliability standards information that is no longer maintained online. For example, standards that expired or were replaced may be removed from the online system. Also, SARs that are no longer being considered in the standards process may be placed in the archived records. Archived information shall be retained indefinitely as practical, but in no case less than five years or one complete standard cycle from the date on which the standard was no longer in effect. Archived records of standards information shall be available electronically within 30 days following the receipt by the standards process manager of a written request.

Numbering System

The standards process manager shall establish and maintain a system of identification numbers that allow reliability standards to be categorized and easily referenced.

Supporting Documents

The following documents may be developed to support a reliability standard. These documents may explain or facilitate implementation of standards but do not themselves contain mandatory requirements subject to compliance review. Any requirements that are mandatory shall be incorporated into the standard in the standard development process. For example, a procedure that must be followed as written must be incorporated into a reliability standard. If the procedure defines one way, but not necessarily the only way, to implement a standard it is more appropriately a reference.

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

Type of Document	Description
Implementation Plan	The implementation plan shall describe when the standard will become effective. If the implementation is to be phased, the plan will describe which elements of the standard are to be applied to each class of responsible entities, and when. The plan will describe any deployment considerations unique to the standard, such as computer applications, measurement devices, databases, or training, as well as any other special steps necessary to prepare for and initially implement the standard.
Reference	Descriptive, technical information or analysis or explanatory information to support the understanding and interpretation of a reliability standard. A standard reference may support the implementation of a reliability standard or satisfy another purpose consistent with the reliability and market interface principles.
Supplement	Data forms, pro forma documents, and associated instructions that support the implementation of a reliability standard.
Training Material	Training materials that may support the implementation of a reliability standard or satisfy another purpose consistent with the reliability and market interface principles.
Procedure	Step-wise instructions defining a particular process or operation. Procedures may support the implementation of a reliability standard or satisfy another purpose consistent with the reliability and market interface principles.
White Paper	An informal paper stating a position or concept. A white paper may be used to propose preliminary concepts for a standard or one of the documents above.

Appendix A — Information in a Standard Authorization Request

The table below provides a representative example¹⁰ of information in a Standard Authorization Request. The standards process manager shall be responsible for implementing and maintaining a form similar to this template, as needed to support the information requirements of the standards process.

Standard Authorization Request Form

Title of Proposed Standard:
Request Date:

SAR Requester Information

Name:	SAR Type (Check one box.)
Company:	<input type="checkbox"/> New Standard
Telephone:	<input type="checkbox"/> Revision to Existing Standard
Fax:	<input type="checkbox"/> Withdrawal of Existing Standard
E-mail:	<input type="checkbox"/> Urgent Action

Purpose (Describe the purpose of the proposed standard – what the standard will achieve in support of reliability.)
--

Industry Need (Provide a detailed statement justifying the need for the proposed standard, along with any supporting documentation.)

¹⁰ The latest version of this form can be downloaded from the NERC standards development Web page: <http://www.nerc.com/~filez/sar.html>

Brief Description (Describe the proposed standard in sufficient detail to clearly define the scope in a manner that can be easily understood by others.)

Reliability Functions

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

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

Reliability and Market Interface Principles

Applicable Reliability Principles (Check all boxes that apply.)	
<input type="checkbox"/>	1. Interconnected bulk power systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.
<input type="checkbox"/>	2. The frequency and voltage of interconnected bulk power systems shall be controlled within defined limits through the balancing of real and reactive power supply and demand.
<input type="checkbox"/>	3. Information necessary for the planning and operation of interconnected bulk power systems shall be made available to those entities responsible for planning and operating the systems reliably.
<input type="checkbox"/>	4. Plans for emergency operation and system restoration of interconnected bulk power systems shall be developed, coordinated, maintained, and implemented.
<input type="checkbox"/>	5. Facilities for communication, monitoring, and control shall be provided, used, and maintained for the reliability of interconnected bulk power systems.
<input type="checkbox"/>	6. Personnel responsible for planning and operating interconnected bulk power systems shall be trained, qualified, and have the responsibility and authority to implement actions.
<input type="checkbox"/>	7. The reliability of the interconnected bulk power systems shall be assessed, monitored, and maintained on a wide-area basis.
<input type="checkbox"/>	8. Bulk power systems shall be protected from malicious physical or cyber attacks.
Does the proposed Standard comply with all of the following Market Interface Principles? (Select ‘yes’ or ‘no’ from the drop-down box.)	
Recognizing that reliability is an essential requirement of a robust North American economy:	
1. A reliability standard shall not give any market participant an unfair competitive advantage. Yes	
2. A reliability standard shall neither mandate nor prohibit any specific market structure. Yes	
3. A reliability standard shall not preclude market solutions to achieving compliance with that standard. Yes	
4. A reliability standard shall not require the public disclosure of commercially sensitive information. All market participants shall have equal opportunity to access commercially non-sensitive information that is required for compliance with reliability standards. Yes	

Detailed Description (Provide enough detail so that an independent entity familiar with the industry could draft a standard based on this description.)

Related Standards

Standard No.	Explanation

Related SARs

SAR ID	Explanation

Regional Variances

Region	Explanation
ERCOT	
FRCC	
MRO	
NPCC	
RFC	
SERC	
SPP	
WECC	

Appendix B — Development of the Registered Ballot Body¹¹

Registration Procedures

The Registered Ballot Body comprises all organizations and entities that:

1. Qualify for one of the segments, and
2. Are registered with NERC as potential ballot participants in the voting on standards, and
3. Are current with any designated fees.

Each participant, when initially registering to join the Registered Ballot Body, and annually thereafter, will self-select to belong to one of the segments described above.

NERC general counsel will review all applications for joining the Registered Ballot Body, and make a determination of whether the self-selection satisfies at least one of the guidelines to belong to that segment. The entity will then be “credentialed” to participate as a voting member of that segment. The Standards Committee will decide disputes, with an appeal to the Board of Trustees.

All registrations will be done electronically.

Segment Qualification Guidelines

The segment qualification guidelines are inclusive; i.e., any entity with a legitimate interest in the reliability of the bulk power system that can meet any one of the guidelines for a segment is entitled to belong to and vote in that segment.

The general guidelines for all segments are:

- Corporations or organizations with integrated operations or with affiliates that qualify to belong to more than one segment (e.g., transmission owners and load serving entities) may belong to each of the segments in which they qualify, provided that each segment constitutes a separate membership and is represented by a different representative.
- At any given time, affiliated entities may collectively be registered only once within a segment.
- Any person or entity, such as a consultant or vendor, providing products or services related to bulk power system reliability within the previous 12 months to another entity eligible to join Segments 1 to 7 shall be qualified to join any one segment for which one of the entities receiving those products or services is qualified to join.
- Corporations, organizations, and entities may participate freely in all subgroups.

¹¹ The segment qualification guidelines were proposed in the final report of the NERC Standing Committees Representation Task Force on February 7, 2002. The Board of Trustees endorsed the industry segments and weighted segment voting model on February 20, 2002 and may change the model from time to time. The latest version (approved or endorsed by the NERC Board of Trustees) shall be used in the NERC Reliability Standards Development Procedure.

- After their initial selection, registered participants may apply to change segments annually, according to a defined schedule.
- The qualification guidelines and rules for joining segments will be reviewed periodically to ensure that the process continues to be fair, open, balanced, and inclusive. Public input will be solicited in the review of these guidelines.
- Since all balloting of standards will be done electronically, any registered participant may designate a proxy to vote on its behalf. There are no limits on how many proxies a person may hold. However, NERC must have in its possession, either in writing or by email, documentation that the voting right by proxy has been transferred.

Segments

Segment 1. Transmission Owners

- a. Any entity that owns or controls at least 200 circuit miles of integrated transmission facilities, or has an Open Access Transmission Tariff or equivalent on file with a regulatory authority.
- b. Transmission owners that have placed their transmission under the operational control of an RTO.
- c. Independent transmission companies or organizations, merchant transmission developers, and transcos that are not RTOs.
- d. Excludes RTOs and ISOs (that are eligible to join to Segment 2).

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

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

Segment 3. Load-Serving Entities (LSEs)

- a. Entities serving end-use customers under a regulated tariff, a contract governed by a regulatory tariff, or other legal obligation to serve.
- b. A member of a generation and transmission (G&T) cooperative or a joint-action agency is permitted to designate the G&T or joint-action agency to represent it in this segment; such designation does not preclude the G&T or joint-action agency from participation and voting in another segment representing its direct interests.

Segment 4. Transmission Dependent Utilities (TDUs)

- a. Entities with a regulatory, contractual, or other legal obligation to serve wholesale aggregators or customers or end-use customers and that depend primarily on the transmission systems of third parties to provide this service.
- b. Agents or associations can represent groups of TDUs.

Segment 5. Electric Generators

- a. Affiliated and independent generators.

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

Segment 6. *Electricity Brokers, Aggregators, and Marketers*

- a. Entities serving end-use customers under a power marketing agreement or other authorization not classified as a regulated tariff.
- b. An entity that buys, sells, or brokers energy and related services for resale in wholesale or retail markets, whether a non-jurisdictional entity operating within its charter or an entity licensed by a jurisdictional regulator.
- c. G&T cooperatives and joint-action agencies that perform an electricity broker, aggregator, or marketer function are permitted to belong to this segment.

Segment 7. *Large Electricity End Users*

- a. At least one service delivery taken at 50 kV (radial supply or facilities dedicated to serve customers) that is not purchased for resale.
- b. A single customer with an average aggregated service load (not purchased for resale) of at least 50,000 MWh annually, excluding cogeneration or other back feed to the serving utility.
- c. Agents or associations can represent groups of large end users.

Segment 8. *Small Electricity Users*

- a. Service taken at below 50 kV.
- b. A single customer with an average aggregated service load (not purchased for resale) of less than 50,000 MWh annually, excluding cogeneration or other back feed to the serving utility.
- c. Agents, state consumer advocates, or other advocate groups can represent groups of small customers.
- d. Any entity or person currently employed by an entity that is eligible to join one or more of the other eight segments, shall not be qualified to join Segment 8.

Segment 9. *Federal, State, and Provincial Regulatory or other Government Entities*

- a. Does not include federal power management agencies or the Tennessee Valley Authority.
- b. May include public utility commissions.

Segment 10. *Regional Reliability Organizations and Regional Entities*

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

Appendix C — Examples of Weighted Segment Voting Calculation

(Assumptions on numbers of entities are purely hypothetical and used only for illustrative purposes.)

Ballot Body and Pools

Segment	Registered Ballot Body	Ballot Pools	
		Standard #1	Standard #2
1. Transmission Owners	300	250	100
2. RTOs and ISOs	10	10	8
3. LSEs	200	100	50
4. TDUs	100	75	50
5. Electric Generators	25	20	25
6. Brokers, Aggregators, and Marketers	10	10	10
7. Large End-Use Customers	5	1	4
8. Small End-Use Customers	25	10	5
9. Regulators or Other Government Entities	50	10	15
10. RROs and REs	10	10	8
Totals	735	496	279

Example 1

Segment	Ballot Pool	Votes				Abstain	No Ballot
		Affirmative		Negative			
		# Votes	Fraction	# Votes	Fraction		
1	250	200	0.833	40	0.167	10	0
2	10	8	0.800	2	0.200	0	0
3	100	60	0.632	35	0.368	5	0
4	75	50	0.714	20	0.286	0	5
5	20	7	0.412	10	0.588	2	1
6	10	6	0.600	4	0.400	0	0
7	1	0		0		1	0
8	10	0		0		0	10
9	10	8	0.800	2	0.200	0	0
10	10	7	0.700	3	0.300	0	0
Totals	496	346	5.491	116	2.509	18	16

Weighted segment vote is greater than two thirds AND more than 75% of the Standard ballot pool returned a ballot. Standard is approved.

No "Affirmative" or "Negative" votes cast, so segments not counted in total weighting.

NERC Reliability Standards Development Procedure

Ballots	480	96.8%			
Wtd Vote			0.686		0.314

Percent ballots returned
= $(480/496) \times 100$
= 96.8%

Weighted segment vote
= (Total Fraction) / (Segments Counted)
= $5.491 / 8$

Example 2

Segment	Ballot Pool	Votes				Abstain	No Ballot
		Affirmative		Negative			
		# Votes	Fraction	# Votes	Fraction	# Votes	
1	100	25	1.000	0	0.000	0	75
2	8	6	.8*0.750	2	.8*0.250	0	0
3	50	30	0.600	20	0.400	0	0
4	50	25	0.833	5	0.167	0	20
5	25	18	0.783	5	0.217	2	
6	10	6	0.600	4	0.400	0	
7	4	4	.4*1.000	0	.4*0.000	0	
8	5	5	.5*1.000	0	.5*0.000	0	
9	15	7	.7*1.000	0	.7*0.000	5	
10	8	8	.8*1.000	0	.8*0.000	0	0
Total	275	134	6.816	36	1.384	7	98
Ballots	177	64.36%					
Wtd Vote			0.831		0.169		

Weighted segment vote is greater than two thirds BUT less than 75% of the standard ballot pool returned a ballot. Standard is NOT approved due to lack of a quorum.

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

6.816/8.2 = .802 or 80.2 % approval. Denominator is reduced because Segment 2 counts .8; 7 counts 0.4; Segment 8 counts 0.5; Segment 9 counts 0.7; and Segment 10 counts .8.