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Executive Summary

Drafting teams ("DT") are the foundation of the NERC standard development process. The DT Reference Manual is intended to provide an overview of the commitment required and the necessary work involved in drafting quality reliability standards. This manual is meant to provide and clarify the role and responsibility of each DT member and provide guidance regarding the activities of the team.

This manual specifically focuses on information critical to the DT members to increase the effectiveness of their contributions. However, the manual does not supersede the NERC Rules of Procedure or any standard processes or guidelines approved by the Federal Energy Regulatory Commission ("FERC") or applicable regulatory authorities, which are in force at this time or may be adopted subsequent to the endorsement of this document by the NERC Standards Committee ("SC").

This document is not meant to be duplicative of any existing NERC documentation for standards development; a companion document titled Drafting Team Resources includes each referenced document. Also, pertinent information regarding DT activities may be, in some cases, repeated to provide clear direction for the teams. This document, in conjunction with the most recent FERC-approved version of the Standards Process Manual, provides a foundation and guidance for effective DT activities.
Introduction

The information in this document, DT Reference Manual, provides informal development, standard authorization request, standard and interpretation DTs with guidance on “how” to implement the NERC Standard Processes Manual, but is not intended to be a “rule book.” The DT Reference Manual outlines the roles and responsibilities of DT members throughout the reliability standards development process from the point where the SC first appoints a DT to when a standard has been approved by its ballot pool and adopted by the NERC Board of Trustees (“Board”). The document describes the performance expectations of the NERC SC and identifies how the teams should interact with others involved with standards development.

There are different types of NERC standards-related activities, including:

- **Informal Development** — Prior to the formal standard development process, informal activities may occur with emphasis on industry consensus building. These activities typically will include collaborative activities to produce a preliminary project package.

- **Standard Authorization Request (“SAR”) Drafting Team** — A SAR DT may be appointed by the SC to work with the person who submitted a SAR (requester). The SAR DT helps the requester achieve stakeholder consensus on whether a standard is needed to address a reliability-related need, and on the scope of the project to address the identified need. The role of the SAR DT will be to evaluate and respond to industry comments on the technical justification, background information, potential for industry consensus, and associated cost impact analysis information to determine the level of support and scope of a standard. The SAR and a recommendation by the SAR DT will be presented to the SC; the SC determines whether a standard development project should be pursued. If the SC determines the SAR will move forward, the SAR DT will continue development of the standard.

- **Standard Drafting Team** — The Standard DT develops the draft standard; requests field tests shall be conducted, as needed, in accordance with SC Procedure for Approving a Field Test and Section 10 of the SC Charter; and produces all associated standard documentation, including the implementation plan and technical documents, and assists in developing questions for cost analysis. The DT also assists in the development of comments in response to governmental authorities. The role of the DT concludes when the standard has been approved by NERC’s Board and governmental authorities as an enforceable standard, or when the DT is disbanded by the SC.

- **Interpretation Drafting Team** — The Interpretation DT (“IDT”) develops an interpretation of a standard. The IDT also assists in the development of comments in response to Governmental Authorities. The role of the IDT concludes when the interpretation has been approved by NERC’s Board and applicable governmental authorities as an enforceable interpretation, or when the IDT is disbanded by the SC.

DTs are encouraged to seek additional guidance, with support from the SC and its Project Management Oversight Subcommittee (“PMOS”), from NERC’s standing technical committees, as needed, including the Standards Committee, Compliance and Certification Committee, Functional Model Advisory Group, or NERC staff. The NERC Standards Developer will facilitate and route the request to the proper group.

**Principles Supporting the NERC Standards Development Process**

The work of SAR DTs and DTs is guided by the most recent, FERC-approved version of the NERC Standard Processes Manual, and supplemented by the following documents:
• **Standard Drafting Team Scope** which is applicable to both SAR and standard DTs

• **Roles and Responsibilities: Standards Drafting Team Activities**

• **Standards Development Process Participant Conduct Policy**

• Various SC Resource and developmental history documents found at the beginning of the Appendices

The following attributes serve as a foundation for development of high-quality, technically sound, results-based standards. All DTs should be familiar with, and produce work products that align with these principles.

**Results-based Requirements (Section 2.4 of the SPM):**

The body of reliability requirements collectively supports a “defense-in-depth” strategy supporting an Adequate Level of Reliability (“ALR”)\(^1\) of the Bulk-Power System. Each requirement of a reliability standard shall identify what Functional Entities shall do, and under what conditions, to achieve a specific reliability objective and not how that objective is achieved. There are several categories of requirements, each with a different approach for measurement.

a) **Performance-based Requirements** define a specific reliability objective or outcome achieved by one or more entities that has a direct, observable effect on the reliability of the Bulk-Power System, i.e. an effect that can be measured using power system data or trends. In its simplest form, a performance-based requirement has four components: who, under what conditions (if any), shall perform what action, to achieve what particular result or outcome.

b) **Risk-based Requirements** define actions by one or more entities that reduce a stated risk to the reliability of the Bulk-Power System and can be measured by evaluating a particular product or outcome resulting from the required actions. A risk-based reliability requirement should be framed as: who, under what conditions (if any), shall perform what action, to achieve what particular result or outcome that reduces a stated risk to the reliability of the Bulk-Power System.

c) **Capability-based Requirements** define capabilities needed by one or more entities to perform reliability functions which can be measured by demonstrating that the capability exists as required. A capability-based reliability requirement should be framed as: who, under what conditions (if any), shall have what capability, to achieve what particular result or outcome to perform an action to achieve a result or outcome or to reduce a risk to the reliability of the Bulk-Power System.

**ALR**

The intent of the set of NERC Reliability Standards is to deliver an ALR. The latest ALR definition and objectives may be found in the Drafting Team Reference Manual Resource Package.

**Reliability Principles**

NERC Reliability Standards are based on reliability principles that define the foundation of reliability for the North American Bulk-Power Systems. Each Reliability Standard shall enable or support one or more of the reliability principles ensuring both that the standards support reliability of the North American Bulk-Power Systems and avoid reducing reliability through an unintended consequence.

\(^1\) NERC filed its definition for “Adequate Level of Reliability” with the Commission on May 10, 2013. *Informational Filing on the Definition of “Adequate Level of Reliability*
**Market Principles**
Recognizing that Bulk-Power System reliability and electricity markets are inseparable and mutually interdependent, all reliability standards shall be consistent with market interface principles, 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.

**Ten Benchmarks of an Excellent Reliability Standard**
NERC Reliability Standards are developed to meet the *Ten Benchmarks of an Excellent Reliability Standard*.

**DT Member Roles**

**Standards Developer**
The NERC Standards Developer is a NERC Standards staff member assigned to facilitate and assist DTs to ensure consistency and quality in the development of standard products.

The Standards Developer also coordinates the activities of his or her assigned projects with other Standard Developers, as needed.

The NERC Standards Developer also interacts closely with the designated PMOS representative. The Standards Developer should keep their PMOS representative informed on the status of their project. The PMOS provides project management for the NERC SC and assists the Standards Developer with overcoming obstacles and issues which might delay progress. The Standards Developer keeps the project on track and informs the SC of progress.

**DT, Chair, and Vice Chair**
The DT Chair and Vice Chair have the following additional responsibilities beyond that of DT members, to:

a) lead the DT in the effective dispatch of its standards development obligations;

b) facilitate DT discussions and outreach to reach industry consensus on proposed standard(s) that will achieve the project objectives and DT responsibilities;

c) coordinate with NERC staff in representing the DT before the SC reporting on team progress in implementing the scope of the project objective, the schedule for completion and the need to address any regulatory directives;

d) coordinate, as necessary, with other DTs to ensure that there are no reliability gaps;

e) represent the DT in discussions with governmental authorities on the content of the standard(s) and how the proposed standard(s) address any applicable regulatory directives;

f) ensure project milestones are met and coordinate with the PMOS; and

g) work with the NERC Standards Developer to support regulatory approval of the proposed standard(s), including assisting with providing technical input for:

i. regulatory filings for approval of the proposed standard(s);

ii. responses to a notice of proposed rule-making(s); and

iii. request(s) for clarification or rehearing following the issuance of the rule or order addressing the proposed standard filed for approval.
DT Members
DTs, following NERC’s standard development process and based on agreed upon milestones, are responsible for developing and achieving industry approval of excellent, technically correct (steady-state) standards that provide for an ALR. Some DTs work to modify existing standards to address both specific regulatory authority directives and reliability issues not directed by regulatory authorities. Other DTs work to develop new standards that may or may not be associated with regulatory directives. In all cases, team members are selected from industry volunteers to provide the DT with sufficient technical expertise from diverse industry perspectives as to promote development of reliability standards that, when approved, demonstrate broad industry consensus.

Compliance, Legal, and Technical support (Section 3.6 of the SPM)
As part of an enhanced and more efficient standards development process, the SAR DT or DT may consist of a group of technical, legal, and compliance experts that work cooperatively with the support of the NERC Reliability Standards staff. The technical experts maintain authority over the technical details of the Reliability Standard. These additional individuals are non-voting members of the DT that provide consulting services at points in the process where their input would add value and quality to the standard. These individuals participate on an “as needed” basis and may not be present at all meetings. The DT and PMOS liaison shall develop a project schedule which shall be approved by the Standards Committee. The drafting team shall report progress to the PMOS liaison and the Standards Committee, against the initial project schedule and any revised schedule as requested by the Standards Committee. Where project milestones cannot be completed on a timely basis, modifications to the project schedule must be presented to the Standards Committee for consideration along with proposed steps to minimize unplanned project delays.
Informal Development

This section describes the activities employed prior to formal standard development activities. This preliminary work is not a part of the formal development process and may be used at the discretion of the NERC SC, PMOS or NERC staff depending on the particular facts and circumstances of the proposed project. The informal development activities are meant to identify issues associated with the project and determine whether there is a solution that consensus could be built upon, thereby reducing the time needed during the formal standards development process outlined in the Standards Process Manual.

The informal development activity may also be conducted by existing NERC groups such as the Planning Committee (“PC”), Operating Committee (“OC”), or subgroups reporting to the NERC groups. The informal development activity does not circumvent the formal standards development process. Rather, its use is meant solely to raise issues and build consensus prior to formal standards development.

Informal consensus building activities include, but are not restricted to the following tools to advance industry awareness and build support for the standard:

- Conducting
  - webinars
  - industry surveys
  - in-person workshops
  - in-person meetings, open to the stakeholders
  - straw polls
- Publishing announcements
- Leveraging existing venues such as Compliance Workshops as opportunities to educate and inform stakeholders
- Leveraging existing and historical technical committee work
- Using any applicable NERC communication plans
- FERC outreach
The Work of a Drafting Team (DT)

Prior to the First DT Meeting

Prior to the first meeting of the DT, the Standards Developer will send the following resource documents to all DT team members:

SAR DT
(In the case of a SAR DT, include the SAR submitter in correspondence)

- SAR
- Comments submitted on any draft standard project called the ‘Consideration of Comments’
- Standard Processes Manual
- DT Reference Manual
- Functional Model
- DT Roster

Figure 1 (page 10) shows the typical first steps of NERC’s formal standards development process. The chart shows the process of developing a SAR from the time the requester submits, to the point where the SAR is refined and the work of the SAR DT is accepted by the SC for development of the associated standard. In cases where informal development consensus building activities occurred, the work of the SAR DT should be significantly reduced or not needed, especially if the work addresses FERC directives. Any documents developed during informal development activities will be provided to the SAR DT.

Figure 1 and the discussion on the following pages, assume that stakeholders support the SAR, and the SAR is progressing normally. If stakeholders support a SAR and there is a demonstrable need to move the SAR forward expeditiously, then the SC may allow a requester(s) to work on the SAR and standard in parallel, with some of the steps outlined in the Standards Processes Manual occurring in parallel rather than sequentially.
In Figure 1 below, the SAR DT’s activities are shown in the yellow boxes.

**Figure 1: SAR Development (See Sections 4.1 and 4.2 in the SPM for detailed information)**

**Standard DT**

Prior to the first meeting of the DT, the Standards Developer will send the following resource documents to all DT team members:

- Final SC Authorized SAR
- Draft standard and all material previously developed in informal development activities (if any) or by the SAR DT, or, if no draft standard has been developed, the template(s) needed to develop the standard and associated materials
- DT Roster
- Standard Processes Manual
- DT Reference Manual
- Results-based Template
- Functional Model
- Violation Risk Factors
- Violation Severity Levels Guidelines
- QR process and template
- Adequate Level of Reliability Definition
• Ten Benchmarks of an Excellent Reliability Standard
• Independent Experts’ criteria for steady-state standards

Figure 2 illustrates the typical steps in the standards development process from the point when the SC authorizes NERC staff to solicit DT nominations, to when the approved standard is submitted to applicable governmental authorities for approval as an enforceable standard and finally approved for enforcement.

Figure 2 and the associated discussion on the following pages is a simplified representation of a standard that is progressing normally and with minimal comment/ballot periods. The DT focuses its work on drafting a standard and then considering comments submitted by stakeholders and revising the standard until there is enough stakeholder consensus to achieve approval of the standard or project. To obtain consensus and approval, additional comment/ballot periods can be completed, as necessary.

In Figure 2 below, the DT’s activities are shown in the yellow boxes.

Figure 2: From SAR to Standard (See sections 4.3-4.7 of the SPM for further details)
The First DT Meeting

At the first meeting of the DT, the Standards Developer or another NERC Standards staff member will provide a brief orientation and training session on the standards process, including the role of the DT and documents listed above. The goals of the first meeting are to:

- Ensure the team understands NERC policies and procedures applicable to DTs, including NERC’s “Antitrust Compliance Guidelines.”
- Ensure that all team members understand the roles and responsibilities of all involved by reviewing the Roles and Responsibilities; Standards DT Activities and Standards Development Process Participant Conduct Policy.
- Review the SAR to ensure that everyone on the team understands the scope of the proposed standard and any FERC Orders/directives that may apply to this proposed new or revised reliability standard — the standard developed or modified by the DT must be within the scope of the approved SAR — the Standards Committee will not let a new or modified standard move forward to ballot if the standard is beyond the scope of the approved SAR.
- Develop a consensus of the DT as to how to respond to stakeholder comments with the intent of revising work products to reflect the consensus view of stakeholders.
- Complete the ‘Consideration of Comments’ report, if available, by developing a summary response to comments submitted by stakeholders.
- Discuss the organization structure of NERC and its committees.
- Develop a project schedule and list of activities for completing the drafting in accordance with SC expectations or Reliability Standards Development Plan (“RSDP”) requirements.
- Understand the function and role of the Project Management Oversight Subcommittee member assigned to the DT.
The Work of a Drafting Team (DT)

- Review the technical justifications, any available cost impact evaluations which may have been done to assist with cost effectiveness determinations, and other pertinent information to help develop a recommendation to the SC to proceed.
- Review the NERC Cost Effective Analysis Process and understand how it relates to the project.
  - Ongoing project control

The DT Chair and NERC Standards Developer are responsible for ensuring that the DT is meeting the milestones in the project schedule and ensuring the PMOS liaison is kept informed. As necessary, the DT Chair should assign work, propose meetings and conference calls, and otherwise take action to control the project.

Comment Report
NERC staff will provide DTs with a report containing all of the comments submitted during the comment period. The following sections of the comment report are required and should not be changed by the DT:

The Appeals Process Statement

Table of Commenters – Original Balloting System Reporting
The Table of Commenters is compiled from the information provided by stakeholders who complete comment forms, is organized to show the industry segments represented by each commenter, and helps show whether the commenters represent all the industry segments that are expected to be impacted by the proposed standard action.

Standards Balloting System (SBS) Comment Report
In 2014, a new balloting and commenting system will be released. Currently, registration is taking place in the SBS and practice balloting and commenting is available for individuals who have completed the registration process. Commenting in the SBS is through ‘Take Survey’ and ‘Social Survey’, a real-time discussion forum, allowing users to provide and respond to comments during an open comment period and select thumbs up or down. Drafting team members will receive a comment report containing all comments received from the individual questions from ‘Take Survey’, ‘Social Survey’ comments and thumbs up and down. It is the drafting team member’s responsibility to review all comments received.

Comments and Responses
Each question asked on the comment form will be included in the report. Following each question there will be a placeholder for the DT to add a ‘Summary Consideration’ of all the comments submitted in response to the associated question.

As comments are reviewed, the DT develops responses. The comments and responses are assembled in the Consideration of Comments report. In its summary the DT shall address all comments submitted. Comments may be in the form of a summary response addressing each of the issues raised during the public posting period.

Evaluation of Comments as an Indication of Potential Ballot Results
Because industry stakeholders are not required to comment, a DT may not receive the full range of concerns in the submitted comments that represent the entire body of stakeholder opinions. DTs are encouraged to evaluate whether the set of comments is representative of the industry or a subset of the industry and to consider the sources of the comments when determining what revisions may be necessary to gain industry support for the standard. From the comment form, the DT can determine if the comments...
represent: 1) an individual in a single industry segment; 2) an individual representing several industry segments; 3) an individual representing a group in a region or industry segment; 4) a group representing several entities; 5) a group on behalf of a single entity; 6) a group representing a region; and 7) a group from a technical committee with members across regions and industry segments.

One way of interpreting the comments is to determine how many ballots are represented by each comment and consider the following:

- A single commenter from an entity that is registered to vote in one industry segment may be considered to represent a single potential ballot.
- A single commenter from an entity that is registered to vote in three industry segments may be considered to represent three potential ballots.
- Six commenters from an entity that is registered to vote in one industry segment may be considered to represent a single potential ballot.
- Six commenters, each from different entities with each of these entities registered to vote in one industry segment, may be considered to represent six potential ballots or, if in multiple industry segments, may result in an even greater number of ballot positions.

**Obligation to Respond to Every Comment**

DTs must review, consider, and provide a response to every comment issue submitted during the public posting. The comments that contain similar issues may be grouped and responded to as summary responses. While DTs are not required to respond to comments submitted outside of public posting periods, they should consider the technical merit of all comments.

**Assessing Technical Merit of Comments**

The DT should work diligently to weigh the value of each comment submitted. When reviewing the comments, the DT should first determine whether the comment has technical merit, and then determine whether the suggestion is likely to receive widespread support from the stakeholder community, with the understanding that 100 percent agreement is likely unachievable.

In some cases, but not all, a DT may feel that additional comment periods are necessary to reach industry consensus.

A Cost Impact Analysis (“CIA”), as identified in the Cost Effective Analysis Process (CEAP) phase 1, is meant to identify potential egregious costs associated with a new standard. If a CIA was conducted, results should be used only in the context of providing further information along with the SAR and should be provided to the SC.

**Practical Tips for Addressing Comments**

One approach to completing the Consideration of Comments report is for the DT to review all the comments submitted in response to a particular question and then have a discussion. Some DTs find it useful to craft responses together, developing a draft response to each unique comment during the meeting, skipping over duplicate comments. Other DTs prefer to divide the comments among team members allowing the assigned team member to prepare an initial draft response for team discussion at its meeting. In either case, review and discussion should support the DT’s efforts to reach a stakeholder consensus.
Additional DT Guidance

NERC Staff Creates Final Drafts
After the DT considers all comments, the Standards Developer will draft a ‘Summary Consideration’ for each question and fill out the cover sheet for the Consideration of Comments report for review by the DT. The NERC Standards Developer will work in conjunction with NERC legal and Standards Management staff to ensure the quality of the Consideration of Comments report. If extensive changes are necessary as a result of this review, the Standards Developer, working with the requester and Chair, should distribute the revised documents to the entire DT for their review.

DT Requests Authorization to Move a Standards Product Forward in the Standards Process
When the DT believes there is sufficient industry consensus based on a majority of comments of a reliability-related need for the proposed standard action and the appropriate scope of the requirements, the DT provides a recommendation to the Standards Committee that includes the following:

- A statement indicating the SAR DT believes there is stakeholder consensus on the following: a reliability-related need for the proposed standard action and the appropriate scope of the requirements;
- A summary listing of the work of the DT to achieve stakeholder consensus including: 1) dates each draft of the standard product was posted for comment; 2) a link to the associated Standards Development web page; and 3) a link to redline version of the “final standard product” to show changes from the last version of the standard product posted for comment;
- An analysis of the diversity of stakeholder participation in the comment periods;
- Identification of any strong minority views that were not satisfied during the revisions made to the standard product and pertinent CEAP cost impact information that may have been collected during the comment period(s);
- A preliminary projection of the project schedule, based on the scope of the SAR, regulatory deadlines and other factors. The DT, Standards Developer, and the PMOS member are responsible for creating the schedule. In general, schedule estimates should be six months for narrowly-scoped projects and no more than 12 months for broadly scoped projects. However, accelerated schedules (such as schedules with aggressive meeting timelines and delivery dates in order to meet regulatory directives) may be needed in certain cases. The goal of developing this schedule should be to estimate a delivery date (or dates) with an accuracy of +/- three months.

Quality Reviews (“QR”) are conducted during standard development and are required by the SC prior to the initial ballot and formal comment period. The DT Chair may, at any time, ask the NERC Standards Developer to initiate the necessary requests for a QR and it may be conducted depending on available resources. The QR will evaluate whether the documents are within the scope of the associated SAR, whether the Reliability Standard is clear and enforceable as written, and whether the Reliability Standard meets the criteria specified in NERC’s Ten Benchmarks for Excellent Standards and criteria for governmental approval of Reliability Standards. The DT shall consider the results of the QR, decide upon appropriate changes, and recommend to the Standards Committee whether the documents are ready for formal posting and balloting. Results of the QR are not binding and are considered only as suggestions to the DT. The NERC Template for Quality Review of NERC Reliability Standard or Interpretation may also be a valuable tool for the DT to utilize to evaluate drafts of a Reliability Standard prior to subsequent postings where a formal QR is not performed.
FERC Directives
NERC, as the Electric Reliability Organization ("ERO") is required to address FERC and other governmental authorities’ directives. Some of these directives are very specific and identify that a standard or requirement should be developed or modified to address a specific reliability need — other directives are more general and direct the ERO to consider specific stakeholder comments. Even if some stakeholders indicate they don’t support the directive, the ERO has an obligation to address the directive, and responses to comments must convey this objective when necessary. A complete discussion on addressing FERC and other governmental authorities’ directives can be found at Roles and Responsibilities: Standards Drafting Team Activities.

Where there is a FERC Order to make a specific modification to a requirement, the DT should either make the conforming modification or propose an alternative method of achieving the same reliability objective to address the Order that is “equally efficient and effective.” The DT should ask stakeholders for feedback. Comments provided by stakeholders can be cited as justification for an alternate “equally efficient and effective” approach to addressing the reliability issue subject to the Order, but cannot constitute the sole basis for the approach.

DT Reviews Directives with FERC Staff
FERC assigns one or more staff to work as an observer with each DT and to communicate FERC views and concerns to the team. Each team should seek FERC staff input regarding whether the proposed standard addresses the intent of the directive.

In some cases, further discussions with FERC may be needed outside of DT meetings. In these cases, the team or leadership of the DT may request a meeting with FERC staff to gather more information about the intent of the directive. This request should be made through NERC management who will coordinate the meeting. The team should prepare an agenda so that it has a clear list of issues for discussion.

If FERC staff requests a meeting, then the DT should be prepared to identify how the proposed standard addresses the directive. If the team has developed an “equally efficient and effective” alternate method of achieving the directive, then the team should be prepared to clearly identify why it believes the alternative method of achieving the objective is “equally efficient and effective.”

If FERC staff offers advice on issues outside the scope of the directives, the DT should consider this advice in the same manner that it considers advice from any other source. A full description of FERC staff involvement in DT activities, and in consideration of the advice of FERC staff can be found in the Roles and Responsibilities; Standards Drafting Team Activities.

DT Develops Proposed New or Revised Defined Term(s) (if necessary)
Before a DT adds a new term, the team should check the latest version of the Glossary of Terms for Reliability Standards to determine if the same term, or a term with the same meaning, has already been defined. If a term is used in a standard and the term is defined in a collegiate dictionary, then there is no need to also include the term in the Glossary of Terms Used in NERC Reliability Standards. The addition of an adjective or a prefix to an already defined term should not result in a new defined term.

The DT should avoid developing new definitions unless absolutely necessary. When a DT finds it necessary to propose revision(s) to existing defined terms, the DT proposing the revisions is required to prepare and post its analysis of the impacts to other standards at the time such revision(s) to the defined term are
posted for comment and ballot. Each new or revised defined term must be balloted by stakeholders and is subject to the same approval rules as a standard.

DTs may decide to create a new defined term when the same term would be used repeatedly within a standard or group of standards, and defining the term would improve the clarity of the standards. When a term can be defined with a small number of words, it may make sense to just use those words in the requirements, rather than creating a new defined term. In such cases, the DT should consider using the phrase rather than trying to obtain stakeholder consensus on the new term. See Section 5.0, Process for Developing a Defined Term, of the Standards Processes Manual.

If a DT adds definitions to a standard, the definitions are placed on a separate page following the ‘standard roadmap’ and before the first page of the standard.

**DT Develops a Supplemental SAR (if needed)**

If stakeholder comments indicate the existing scope of the approved SAR should be expanded, the DT should consider and if necessary, develop a ‘supplemental SAR’ that includes this revised scope. The supplemental SAR must be submitted to the NERC staff who will forward the SAR to the Standards Committee for approval to post for comment. If approved for posting, the DT can continue to work on the proposed standard while it collects stakeholders support on the expanded scope of the project.

**DT Develops an Implementation Plan**

Each DT must develop an implementation plan that informs responsible entities of the actions (compliance obligations) required once the standard becomes effective. The implementation plan must be posted for at least one 45-day formal comment period — and there must be a question on the associated comment form to ask for feedback on the proposed effective date or dates. The DT must collect comments on the implementation plan before the associated standard can be balloted.

While the Standards Committee allows great latitude in the format of implementation plans, each implementation plan must include the following:

- **Prerequisite approvals or activities** — If the proposed standard cannot be implemented until some other standard is implemented or until some other activity is accomplished, the DT must identify these prerequisites
  - If there are no prerequisite approvals, the DT should include a sentence in the implementation plan that states the proposed standard is not dependent on any prerequisite approvals

- **Recommended modifications to already approved standards** — If an already approved standard has requirements that need to be modified or retired as a result of a new proposed standard, the DT must coordinate and ensure the implementation plan identifies the required actions (for example, coordinate the retirement of existing requirements with the effective date of the proposed standard/requirements) so as not to expose the Bulk-Power System to any reliability risks.

- **List of functions that must comply with the requirements in the standards** — The DT should list the functional entities that are identified in the applicability section of the proposed standard.

- **Proposed effective date or dates** — The DT must list the proposed effective date or dates and must include a justification for the proposed effective date or dates. The proposed effective date or dates in the implementation plan must match the Proposed Effective Date section of the associated standard. The justification should provide for adequate time for entities to:
  - Write procedures required to comply with a requirement
- Provide training on new tools or procedures
- Implement other requirements in the standard (if necessary)

**DT Develops Supporting Document(s) (if necessary)**
Sometimes a DT develops a supporting document to explain or facilitate implementation of standards. Supporting documents provide guidance and do not contain mandatory requirements subject to compliance review. There are many different types of supporting documents, including but not limited to the following:

**Reference or Application Guideline** — A 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 by step 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.

If the DT wants its supporting document to be publicly posted with the associated approved standard, the DT needs to obtain the approval of the Standards Committee.

The process for obtaining approval to post supporting documents is addressed in the **SC Procedure for Approving the Posting of Reliability Standard Supporting Reference**.
Parts of the Results Based Standard

DT Develops a Standard Development Timeline
As the DT develops its draft standard, it needs to develop what NERC calls a ‘standard development timeline,’ which provides a list of the major milestones in the standards development process from start to projected completion. The timeline provides stakeholders with an understanding of the progress of the project, and should be consistent with the DT’s detailed project schedule.

The timeline information is inserted in the front of each standard and is updated each time the standard is posted for comment or review.

Section A – Introduction
Section A of the standard includes introductory information as shown in the example of a typical standard provided in Figure 3 below.

A. Introduction
1. Title: Reliability Coordinator Actions to Operate Within IROLs
2. Number: IRO-009-1
3. Purpose: To prevent instability, uncontrolled separation, or cascading outages that adversely impact the reliability of the interconnection by ensuring prompt action to prevent or mitigate instances of exceeding Interconnection Reliability Operating Limits (IROLs).
4. Applicability
   4.1 Functional Entity: Reliability Coordinator
   4.2 Facility Limitations/Specifications:
      4.2.1 The IROLs covered in this standard are limited to those associated with contingencies that were studied under FAC-011 and FAC-014.
5. (Proposed) Effective Date: The first day of the first calendar quarter, one year after applicable regulatory approval; or in those jurisdictions where no regulatory approval is required, the first day of the first calendar quarter one year after Board of Trustees’ adoption.

Figure 3: Example Introduction Section of Standard

Title: The title should be a brief descriptive phrase that identifies in a clear and concise manner the subject addressed by the standard. The title should answer the following questions:
   • What reliability-related topic does the title address?
   • How should the topic be described, limited, or specified?

The title should not start with the word “to,” include the word “standard,” or be excessively wordy or vague. Standard titles should also not be complete sentences.
Number: The standard number for a new standard is assigned by the NERC staff. The numbering convention has three parts:

1. A three-letter acronym denoting the general topical area of the standard
2. The standard number within that topical area, beginning with 1 and increasing sequentially
3. The version of that standard

If a standard is being proposed for revision, the standard is given a new ‘version number.’ If a new standard is developed, the new standard is given the next unused number in the topical sequence. A detailed explanation of the Standards Numbering Convention is posted on the Standards web page in the resource documents section.

A sample standard number is: PRC-012-1.

Purpose: A clear statement that describes how the standard contributes to the reliability of the Bulk-Power System. The purpose of a specific standard will not necessarily be the same as the purpose on a SAR as some SARs have a purpose statement that addresses modification of a set of standards.

Applicability: NERC’s Reliability Standards apply to users, owners, and operators of the facilities that make up the Bulk-Power System. The applicability section of a standard must identify the functional entities from the Functional Model that are required to comply with the requirements in the standard. In a small number of cases, when a number of requirements are being developed that will apply to a large number of functional entities, the DT may work with NERC Compliance staff to define a term that is used within a particular standard or group of standards to refer to that group of functional entities collectively.

In some cases, the DT will identify the need to limit the applicability of one or more requirements in a standard to a subset of entities or facilities so that the applicability aligns with the reliability risk. In most cases, these limitations should be identified in the applicability section of the standard, rather than embedded in the requirements. For example, a standard may limit applicability to certain facilities based on electric characteristics, such as transmission facilities energized at 200 kilovolts or greater. If no functional entity limitations are identified, the default is that the standard applies to all identified listed functional entities – so that if the applicability identifies, “Transmission Operators”, then the standard applies to all Transmission Operators that have registered in NERC’s Compliance Registry.

The NERC Statement of Compliance Registry Criteria (codified as Appendix 5B of the NERC Rules of Procedure) is the FERC-approved vehicle by which NERC and the Regional Entities identify the entities responsible for compliance with NERC and Regional Reliability Standards. The criteria are based on the facilities an entity owns or operates and represent a FERC-approved and jointly accepted policy decision among NERC and industry stakeholder groups on how to apply both NERC’s continent-wide and regional reliability standards.

The NERC definition of Bulk Electric System (“BES”), which was approved by FERC, is available in the NERC Glossary of Terms Used in NERC Reliability Standards. The DT should develop requirements that apply generally using the BES definition, informed by the criteria in the Statement of Compliance Registry Criteria. If, in order to achieve a reliability objective, the DT believes a requirement should apply to functional entities in accordance with criteria that are either more restrictive or more expansive than identified in the definition of BES and the Statement of Compliance Registry, the DT must post its justification for comment along with the draft standard as it moves through the standards development process.
If a DT wants to extend the applicability of a standard in ways that require modification of the *NERC Statement of Compliance Registry Criteria*, the DT must demonstrate that failure to expand the applicability would result in a reliability gap and must also consult with NERC Legal.

**Proposed Effective Date:** This date identifies when entities must be compliant with the requirements in the standard. The standard cannot be enforced in the United States until it has been approved by FERC. In Canada, each province is entitled to have its own process for approving NERC Reliability Standards. Thus, a standard may become enforceable at different times in different jurisdictions. The dates entered must be the first day of the first calendar quarter after entities are expected to be compliant. This gives time for the compliance monitoring and enforcement program to develop reporting instructions and modify the Compliance Data Management System(s) both at NERC and Regional Entities, as well as enables industry preparations to meet the requirements in the standard. The proposed effective date in the standard must match the date provided in the associated implementation plan. Some standards may have different proposed effective dates for different requirements.

In identifying effective dates, consideration must be given to jurisdictions where no regulatory approval is required and standards become mandatory upon NERC Board of Trustees adoption. NERC Legal, working with Canadian regulatory authorities, has developed standard language to account for the various approaches to making standards enforceable. This language is updated from time to time to reflect changes in various jurisdictions. The current language will be provided to each DT by the Standard Developer or NERC Legal representative assigned to the project.

The following presents some samples of appropriately phrased Proposed Effective Dates for a few situations that may be encountered:

**Sample 1** – For a situation where all the requirements in the standard should become effective on the same day, but there is no reliability reason why the standard must become effective in all jurisdictions at the same time (such as a standard requiring an entity to document its method for some calculation), the Proposed Effective Date may read:

*First day of the first calendar quarter three months following applicable regulatory approval; or, in those jurisdictions where no regulatory approval is required, the first day of the first calendar quarter three months following Board of Trustees adoption.*

**Sample 2** – For a situation where all the requirements in the standard should become effective on the same day, and there is a reliability reason why the standard must become effective in all jurisdictions at the same time (such as a standard that requires specific real-time actions to control frequency – where implementing the standard at different times could result in a lack of coordination between jurisdictions), the Proposed Effective Date may read:

*First day of the first calendar quarter three months following receipt of all applicable regulatory approvals.*

**Sample 3** – For a situation where one or more of the requirements in the standard should become effective before the other requirements (such as a case where the first two requirements in a standard require an entity to produce and distribute a document and the following requirements are aimed at the recipients implementing whatever is contained in the document), but there is no reliability reason why the standard must become effective in all jurisdictions at the same time, the Proposed Effective Date may read:
**Requirement R1 and R2:**

*First day of the first calendar quarter three months following applicable regulatory approval; or, in those jurisdictions where no regulatory approval is required, the first day of the first calendar quarter three months following Board of Trustees adoption.*

**Requirements R3-R6:**

*First day of the first calendar quarter 15 months following applicable regulatory approval; or, in those jurisdictions where no regulatory approval is required, the first day of the first calendar quarter 15 months following Board of Trustees adoption.*

**Section B – Requirements and Measures**

Section B of the standard includes requirements, associated measures, violation risk factors, and time horizons as shown in Figure 4, below.

**B. Requirements and Measures**

**R1.** Each Responsible Entity shall have an event reporting Operating Plan in accordance with EOP-004-2 Attachment 1 that includes the protocol(s) for reporting to the Electric Reliability Organization and other organizations (e.g., the Regional Entity, company personnel, the Responsible Entity’s Reliability Coordinator, law enforcement, or governmental authority). [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

**M1.** Each Responsible Entity will have a dated event reporting Operating Plan that includes, but is not limited to the protocol(s) and each organization identified to receive an event report for event types specified in EOP-004-2 Attachment 1 and in accordance with the entity responsible for reporting.

**Figure 4: Example Requirements Section of Standard**

**Requirements:** Each requirement should answer: “What functional entity is required to do, under what conditions and to what level, for what key result?” The key results identify what outcome is to be achieved by the requirement. Sometimes the “key result” is obvious and does not need to be stated.

Each statement in the requirements section must 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 or placed in a footnote.

Some requirements may have “parts.” (Parts were previously called sub-requirements, but in response to FERC orders that would have required separate VRFs and VSLs for each sub-requirement, the approach was changed and any component of a requirement is called a part. Parts of a requirement are numbered by using the number of the requirement, followed by a decimal number (e.g., Requirement R4 could have parts 4.1, 4.2, and 4.3).

Each requirement should:

- Include the name of the responsible functional entity or entities.
- Include the word ‘shall.’
- Be written in
• ‘Active’ voice rather than the ‘passive’ voice.

• Concise, clear, measurable language. (Requirements that are not measurable or are subject to multiple interpretations are unacceptable.)

- Avoid use of ambiguous adjectives such as ‘sufficient’ or ‘adequate’ as these can’t be measured objectively. When a range of acceptable performance is acceptable, the range needs to be qualified and bounded by measurable conditions/parameters.

- Achieve one objective. If a requirement achieves two objectives, such as developing a document and distributing that document, then each objective should be addressed in its own requirement.

- Contribute to one or more reliability principle and the specific objective of the standard. All parts of a requirement must contribute to the objective of the main requirement. If there is only one part that contributes to the objective of the main requirement, there should only be one main requirement and no parts.

- Avoid more than one level of parts as it may reduce clarity.

Where practical, requirements should use language that is already familiar to the end users of NERC’s standards. To that end, a list of ‘verbs’ already used in NERC standards refer to Attachment A.

In general, the language of a requirement should follow the format of:

[Entity X] shall perform [specific action] by [a specific time or frequency].

Measurability is an important aspect of writing good requirements. Consider adding some time frame for measuring the required performance, as FERC has determined that unless the requirement includes a time period, each incidence of noncompliant performance must be assessed as a separate act of noncompliance, subject to an individual penalty or sanction. In addition, if performance results can be practically measured quantitatively, metrics should be provided within the requirement. Not all requirements lend themselves to quantitative measures, but the DT must ask itself how a requirement will be objectively measured.

The DT is also urged to develop requirements which recognize the issues raised by the Commissions March 15, 2012 Order on NERC’s Find, Fix, Track and Report (FFT) program and the associated NERC Project 2013-02, Paragraph 81. Most importantly, the DT should not develop requirements that do little or nothing to enhance reliability. There are a number of criteria associated with requirements that NERC retired from Reliability Standards, namely those that were duplicative with other standards and those that were administrative in nature. Other undesirable attributes of requirements are those that are strictly reporting or focused on only providing documentation. The DT should focus on developing requirements that are results-based and in all cases support achieving an adequate level of reliability.

**Application of Paragraph 81 Criteria:** When developing requirements it is also important to know the Paragraph 81 (P81) criteria. These criteria were used to determine if an approved ERO standard’s

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2 The Commission noted that “some current requirements likely provide little protection for Bulk-Power System reliability or may be redundant.” Commission invited “NERC, the Regional Entities and other interested entities to propose appropriate mechanisms to identify and remove from the Commission-approved Reliability Standards unnecessary or redundant requirements.”
requirements were candidates for removal from the set of approved Reliability Standards’ requirements. Therefore any requirements developed by a DT should be developed to avoid the following criteria:

- Criterion A (Overarching Criterion): little, if any, benefit or protection to the reliable operation of the BES

- Criteria B (Identifying Criteria)
  - B1. Administrative
  - B2. Data Collection/Data Retention
  - B3. Documentation
  - B4. Reporting
  - B5. Periodic Updates
  - B6. Commercial or Business Practice
  - B7. Redundant

- Criteria C (Additional data and reference points)
  - C1. Part of a Find Fix and Track (FFT) filing
  - C2. Being reviewed in an ongoing Standards Development Project
  - C3. Violation Risk Factor (“VRF”) of the Requirement
  - C4. Tier in the 2013 Actively Monitored List (“AML”)
  - C5. Negative impact on NERC’s reliability principles
  - C6. Negative impact on the defense in depth protection of the BES
  - C7. Promotion of results or performance based Reliability Standards

Specifically, for a requirement to be deemed unsatisfactory from P-81 Criteria, it must satisfy both, Criterion A and at least one of the Criteria B. Criteria C were considered as additional information to make a more informed decision with respect to a requirement’s validity.

**Application of Expert Review Team Criteria:** The Independent Expert Review Panel consisted of a panel of five experts who conducted a review of all of the existing approved Reliability Standards. The method for their review is summarized here. The DT may use this process and questions in conjunction with other tools as they develop each draft requirement. See Figure 5 below, for the Evaluation Flowchart.

**Review of Content**
1. Is the content of the requirement technically correct, including identifying who does what and when?
2. Are the correct functional entities identified?
3. Are the appropriate actions for which there should be accountability included or is there a gap?

**Review for Quality**
1. Should the requirement stand alone as is or should it be consolidated with other standards?
2. Is it drafted as a results-based standard (“RBS”) requirement (performance, risk (prevention) or capability) and does it follow the RBS format (e.g., sub-requirement structure)?
3. Is it technologically neutral?
4. Are the expectations for each function clear?
5. Does the requirement align with the purpose?
6. Is it a higher solution than the lowest common denominator?
7. Is it measurable?
8. Does it have a technical basis in engineering and operations?
9. Is it complete and self-contained?
10. Is the language clear and does not contain ambiguous or outdated terms?
11. Can it be practically implemented?
12. Does it use consistent terminology?

**Figure 5: Evaluation Flowchart**

**Measures:** Each requirement must have at least one measure. A single measure can be used for more than one requirement. Each measure should identify the requirement or requirements associated with that measure either in the body of the text or in parentheses immediately after the text. The DT can begin writing measures by identifying what evidence the compliance enforcement authority could objectively use to measure the performance identified in the associated requirement.

Each measure must identify the functional entity with the performance being measured – the same functional entity that is responsible for the associated requirement. Each measure must be tangible, practical, and as objective as is practical and should support requirements by identifying what evidence or types of evidence could be used to show that an entity is compliant with the requirement. For some requirements, only one type of evidence is acceptable – but for many requirements, a range of evidence could be acceptable. A goal in implementing the Reliability Standards process is to avoid requiring entities to modify existing practices by adopting tools or techniques that don’t contribute to improved reliability. For that reason, requiring that all entities use the same method of demonstrating compliance should be avoided unless it is necessary for reliability.
Section C – Compliance
The DT will assist NERC staff, as necessary, to develop Compliance Elements for the standard. Section C of the standard includes the compliance information as shown in Figure 6 below.

### C. Compliance

**1. Compliance Monitoring Process**

**1.1 Compliance Enforcement Authority**

The Regional Entity shall serve as the Compliance Enforcement Authority (CEA) unless the applicable entity is owned, operated, or controlled by the Regional Entity. In such cases the ERO or a Regional Entity approved by FERC or other applicable governmental authority shall serve as the CEA.

**1.2 Evidence Retention**

The Responsible Entity shall keep data or evidence to show compliance in accordance with the requirements of this standard (i.e., as identified below) unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation.

[Refer to NERC Compliance Process Bulletin #2011-001, Data Retention Requirements, and NERC Rules of Procedure (RoP), Appendix 4C, Uniform Compliance Monitoring and Enforcement Program for additional information on Evidence retention.]

**1.3 Compliance Monitoring and Enforcement Processes:***

- Compliance Audit
- Self-Certification
- Spot Checking
- Compliance Investigation
- Self-Reporting
- Complaint

**1.4 Additional Compliance Information**

None

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

**1.5 Additional Compliance Information**

None.

*Figure 6: Compliance Monitoring Process*

Additional Compliance Information – A variety of information may be listed in this section of the standard. If there are special instructions for measuring compliance these should be outlined here. If the standard relies on exception reporting or periodic reports, then the criteria for submitting the reports should be included in this section of the standard.
Table of Compliance Elements – Violation Severity Levels appear in the “Table of Compliance Elements” section of the standard. The VSLs provide guidance on the way that NERC will enforce the Requirements of the proposed Reliability Standard. To assist the DT in the development of VSLs, refer to the Violation Severity Level Guidelines. These guidelines outline the criteria and attributes for developing VSLs.

Violation Risk Factors: Each requirement must also have a Violation Risk Factor associated with it. The risk factor is one of several elements used to determine an appropriate sanction when the associated requirement is violated. The VRF assesses the impact to reliability of violating a specific requirement and shall be categorized as a high, medium or low risk. The criteria for categorizing a VRF, which has been filed with FERC as part of the ERO’s Sanction Guideline (codified as Appendix 4B of the NERC Rules of Procedure), along with the FERC identified five guidelines that FERC uses to determine whether to approve the VRFs submitted for approval, can be found on the NERC web site, Violation Risk Factors.

If a requirement has parts, and some of the parts are much more critical to reliability than others, then the DT should consider subdividing the requirement into separate requirements and assigning a VRF to each of the individual requirements.

Time Horizons: Each standard requirement must also have an associated time horizon to differentiate requirements that involve shorter and narrower timeframes (e.g., real-time operations) from those that involve longer and broader time frames (e.g., long-term planning).

Standard requirements involving longer and broader time horizons, such as long-term planning activities, may have a lesser immediate impact and pose less immediate risk to the reliability of the Bulk-Power System than requirements involving shorter and narrower timeframes. The ERO’s Sanction Guideline (codified as Appendix 4B of the NERC Rules of Procedure) use the time horizon element in the determination of penalties for violations on recognition of the “more immediate” nature — and hence higher risk — of the threat of some violations as opposed to the lesser-risk “future threat if not corrected” nature of other violations. When establishing a time horizon for each requirement, the criteria presented in Time Horizons should be used.

Although each requirement and its parts, collectively, should be assigned a single VRF it is acceptable to include more than one time horizon for a requirement. Some requirements include performance that may take place over multiple time horizons.

Section D – Variances
Most standards can be written so that they apply on a continent-wide basis without the need for a variance. FERC accepts that a variance may be needed under the following conditions (Order No. 672):

As a general matter, we will accept the following two types of regional differences, provided they are otherwise just, reasonable, not unduly discriminatory or preferential and in the public interest, as required under the statute: (1) a regional difference that is more stringent than the continent-wide reliability standard, including a regional difference that addresses matters that the

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3 In its May 18, 2007 Order on Violation Risk Factors, FERC identified five “guidelines” it uses to determine whether to approve the Violation Risk Factors submitted for approval.

continent-wide reliability standard does not; and (2) a Regional Reliability Standard that is necessitated by a physical difference in the Bulk-Power System.

Regional Variances — Regional variances are generally identified during the SAR stage, but may be identified later in the process. They are specified and requested by the Region that wants the variance. While both the SAR DT and the DT must ask stakeholders if they see a need for a regional variance, the DTs do not have primary responsibility for writing these variances — writing a variance is the primary responsibility of the entity that requests the variance, or their designee. If a DT receives a variance as it is developing a standard, the team will post the variance for comment along with the proposed standard, and will ask stakeholders if they support the variance.

If stakeholders do not support the variance as proposed, the entity that wants the variance may modify the variance and post it again for another comment period, or the entity may withdraw its request for the variance. The entity requesting the variance is responsible for working with the DT to respond to each comment submitted in response to the proposed variance.

Section E — Interpretations
For new or revised standards the DT will typically include the word “None” in this section. Past interpretations that may have been written for a standard will be incorporated into any revision to a standard the DT is developing.

Interpretation DTs will include the approved interpretation by appending their work to the existing approved standard to which it applies, and referencing it in this section until such time as the standard is revised. Interpretation DTs will respond to a request for interpretation following the guidance provided in Guideline for Interpretation Drafting Teams. In general, the interpretation may not change the standard, address a weakness in the standard, deal with any part other than the requirement section and must not opine on achieving compliance.

Interpretation DTs are encouraged to review past history of the standard’s development by assessing the full record including, but not limited to, past comments and responses. Also, if a potential reliability issue or gap exists or is determined during the interpretation process, the team should document suggested revisions, develop a SAR to revise the standard accordingly and submit the SAR to NERC staff.

Section F – References
The DT may need to develop a form or other document to support the implementation of a standard. If this happens, the document is listed in this section of the standard. Transmission Loading Relief (“TLR”) Reports would be an example of an ‘associated document’.

The DT may also identify industry references that support or are associated with the standard, such as a technical paper published by IEEE, and these may be listed as ‘Associated References’. However, DTs should be careful to ensure that all of the information necessary to comply with the standard is contained within the standard itself (i.e., the standard must be self-contained and stand-alone). Any pertinent references will be referred to in this section.
Appendix

The DT is encouraged to use the developmental history of the standards projects on the NERC web site Reliability Standards Development pages. These pages provide examples of a SAR that was posted for comment, all the comment forms, all the consideration of comment reports, and the responses to the comments submitted with a ballot for standards previously developed.

The documents and DT requests previously submitted to the Standards Committee are posted in the applicable Standards Committee meeting minutes.
Attachment A — Verbs Used in Reliability Standards

When developing a new or revised standard, DTs should try to use terms that have already been defined or terms that are already used in other Reliability Standards to achieve a high degree of consistency between standards. To that end, the Standards staff, working with key DT members, put together the following list of verbs and their associated definitions. These verbs are all used in requirements in existing Reliability Standards. This verb list and its definitions are not in the Glossary of Terms used in NERC Reliability Standards but these verbs and their definitions should serve as a reference for DTs who are trying to minimize the introduction of new terms into Reliability Standards.

### Verb List Definitions

<table>
<thead>
<tr>
<th>Verb</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquire</td>
<td>To obtain something new, such as a trait, ability or characteristic; to get as one's own; to locate and hold.</td>
</tr>
<tr>
<td>Activate</td>
<td>To make active; to start development of</td>
</tr>
<tr>
<td>Address</td>
<td>To communicate directly, spoken, written or otherwise; to direct one's attention to</td>
</tr>
<tr>
<td>Adhere</td>
<td>To give support or bind oneself to observance</td>
</tr>
<tr>
<td>Agree</td>
<td>To concur in, as an opinion; to settle on by comment consent</td>
</tr>
<tr>
<td>Alert</td>
<td>To give warning or notice, or to call to a state of readiness; to make clearly aware of</td>
</tr>
<tr>
<td>Analyze</td>
<td>To review elements and critically examine</td>
</tr>
<tr>
<td>Apply</td>
<td>To make use or put to use</td>
</tr>
<tr>
<td>Appoint</td>
<td>To fix a place or time; to place in office or post</td>
</tr>
<tr>
<td>Approve</td>
<td>To give one's consent to</td>
</tr>
<tr>
<td>Arrange</td>
<td>To put in a proper order, sequence, or relationship; to prepare for; to bring about an agreement or understanding</td>
</tr>
<tr>
<td>Assemble</td>
<td>To put together all relevant pieces</td>
</tr>
<tr>
<td>Assess</td>
<td>To make a determination, evaluation, or estimate; to critic and judge</td>
</tr>
<tr>
<td>Begin</td>
<td>To do or initiate the first part of an action or process</td>
</tr>
<tr>
<td>Calculate</td>
<td>To make a mathematical computation; to solve or probe the meaning of; to design or adapt for a purpose</td>
</tr>
<tr>
<td>Calibrate</td>
<td>To determine, rectify or mark the graduations of; to standardize by determining the deviation from the standard; to adjust precisely for a particular function</td>
</tr>
<tr>
<td>Check</td>
<td>To test, compare or examine to determine if something is as it should be</td>
</tr>
<tr>
<td>Collect</td>
<td>To gather information from multiple sources</td>
</tr>
<tr>
<td>Communicate</td>
<td>To receive or distribute, to convey or make known information via personal, written or electronic methods</td>
</tr>
<tr>
<td>Comply</td>
<td>To execute, conform, adapt, or complete</td>
</tr>
<tr>
<td>Compute</td>
<td>To determine, often mathematically, an answer or sum</td>
</tr>
<tr>
<td>Conduct</td>
<td>To act as a leader, supervisor or to director as leader the performance or action</td>
</tr>
<tr>
<td>Confirm</td>
<td>To prove the truth, validity or authenticity of something</td>
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<tr>
<td>Consider</td>
<td>To give intelligent thought to a situation</td>
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<tr>
<td>Contact</td>
<td>To reach someone through a communication device (telephone, radio, etc.)</td>
</tr>
<tr>
<td>Control</td>
<td>To exercise restraining or directing influence over</td>
</tr>
<tr>
<td>Cooperate</td>
<td>To work together or among others; to act in compliance; to associate with other(s) for mutual benefit</td>
</tr>
<tr>
<td>Coordinate</td>
<td>To mediate the exchange of data between at least two people</td>
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Correct — To alter or adjust so as to meet some standard or required condition
Cover — To treat or include information with; to guard, protect, prevent observation or knowledge of
Create — To produce or bring into existence
Curtail — To cause an action to stop
Define — To mark the limits of with clarity and authority; to specify instruction and interpretation
Demonstrate — To point out, show clearly the existence of; illustrate or explain
Describe — To give an account or represent in words, figure, model or picture
Destroy — To ruin the structure, condition or existence
Detect — To discover or determine the existence, fact or presence
Determine — To analyze
Develop — To set forth or make clear by degrees or in detail; to work out the possibilities
Direct — To use an authoritative voice to tell another individual to perform an action
Disable — To make incapable or ineffective; to deprive a right, qualification, capacity
Disconnect — To sever or terminate a connection of or between
Discuss — To investigate or talk about using reason or argument; to present in detail for consideration or examination
Disperse — To cause to break up or become spread widely, to distribute
Display — To exhibit or make evident for viewing
Disseminate — To spread broadly
Distribute — To divide among several or many; to give out or deliver
Document — To make a printed record of something
Enable — To make possible or able by providing means or opportunity; to give legal power, capacity or sanction
Ensure — To make sure, certain or safe
Enter — To depress keys on a keyboard so as to have information sent to a computer system
Establish — To institute permanently by enactment or agreement; to make firm, stable
Evaluate — To appraise the worth of; to determine or fix the value, significance, condition or worth of
Exchange — To part with, give or transfer while receiving something as an equivalent; to part with for a substitute; to give and receive reciprocally
Execute — To put into effect; to carry out what is required
Exercise — To perform a function or carrying out the terms of an agreement; regular or repeated use or practice in order to develop, improve or display specific capabilities or skills
Explain — To make known, plain, or understandable; to give a reason for a cause
Flag — To signal, mark or identify
Focus — To direct toward a particular point or purpose
Follow — To go, proceed, or come after; to be or act in accordance with; to pursue in an effort; to seek or attain
Give — To administer, guide or direct; to execute or deliver; to offer or furnish; to perform
Have — To hold, maintain or possess something or a privilege; to stand in a certain relationship to
Hold — To have possession or ownership; to have as a privilege or position of responsibility
Identify — To recognize, establish the identity of, ascertain the origin, nature, or definitive characteristics of
Implement — To carry out or fulfill
**Include** — To make a part of a whole, group, or class

**Increase** — To make greater, larger in size, amount, number or intensity

**Indicate** — To point out, state or express briefly, to serve as a sign

**Inform** — To provide information or make aware

**Initiate** — To cause or facilitate the start of

**Install** — To establish in an indicated place, to set prepare, or position for use

**Issue** — To distribute, put forth, or make available

**Keep** — To take notice of by appropriate conduct; to retain possession of; to store

**Know** — To have direct cognition of; to have experience; to be acquainted or familiar with

**Limit** — To restrict, curtail or reduce in quantity or extent

**List** — To make a list of, itemize

**Maintain** — To control to specified limits

**Make** — To cause to exist or happen; to institute or establish; to put together from components

**Manage** — To handle, direct, control or conduct with a degree of skill, to

**Meet** — To conform with or fulfill

**Modify** — To make an adjustment

**Monitor** — To actively scan various information sources

**Notify** — To inform someone of some activity

**Offset** — To serve as a counterbalance

**Open** — To perform actions that will cause a device to physically separate from the electric system

**Operate** — To cause to function or work

**Participate** — To take part or share in something

**Pay** — (Attention) — To give, offer

**Perform** — To carry out an action

**Place** — To put in a particular position; to direct to a desired spot

**Plan** — To arrange or formulate information for a specific intention

**Post** — To publish, announce or advertise

**Prepare** — To make ready in advance

**Protect** — To cover or shield from exposure, injury, damage or destruction

**Provide** — To furnish or supply, make available

**Publish** — To prepare and issue printed information for public distribution or access

**Record** — To enter

**Re-evaluate** — To revise or renew

**Reference** — To supply or cite a source or make a notation

**Release** — To relinquish control over a piece of equipment

**Render** — To cause to be or become

**Repeat** — To perform one or more actions another time

**Report** — To give a formal or informal account

**Request** — To ask permission from someone of higher authority

**Require** — To impose a compulsion or command, to demand as necessary

**Resolve** — To deal with successfully, to clear up, to reach a firm decision about

**Respect** — To consider worthy of high regard, to have reference to; to refrain from interfering with

**Respond** — To provide a reply to some request for information

**Restore** — To return equipment to a specified state

**Resynchronize** — To re-establish synchronicity

**Retain** — To keep possession of, to hold secure or intact
Return — To go back or come back to a practice or condition or specified measure

Review — To look at available data

Sample — To test or example by a sample

Serve — To meet requirements, to work, prepare, provide

Share — To participate in, use or experience jointly or in turns

Shed — To repel without allowing penetration

Sign — To place a signature on a document

Specify — To state explicitly or in detail

Staff — To provide a staff of workers or assistants

Stipulate — To specify or make conditions or requirements for an agreement

Submit — To yield authority; to present or put forward an opinion, information, or idea

Take — To possess and hold

Terminate — To end

Test — To use a procedure to measure or determine something

Track — To follow, pursue, or plot a moving path

Train — To instruct, drill or shape by discipline or precept

Update — To bring up to date

Use — To put into service, employ; to practice

Utilize — To find or make a practical use for

Verify — To prove to be correct by investigation or comparison with a standard or reference

Wait — To curtail actions until some criteria is reached

Work — To physically or mentally make effort or activity toward production or accomplishment
Attachment A — Verbs Used in Reliability Standards

Version History

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<th>Version</th>
<th>Date</th>
<th>Owner</th>
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<td>Updated entire content.</td>
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<td>3</td>
<td>May 19, 2014</td>
<td>Updated by Standards Information Staff to Coordinate with <strong>NERC Drafting Team Resources</strong> posting.</td>
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