

September 10, 2009

#### VIA ELECTRONIC FILING

Ms. Erica Hamilton, Commission Secretary British Columbia Utilities Commission Box 250, 900 Howe Street Sixth Floor Vancouver, B.C. V6Z 2N3

Re: North American Electric Reliability Corporation

Dear Ms. Hamilton:

The North American Electric Reliability Corporation ("NERC") hereby submits an informational filing setting forth a summary of revised guidelines NERC intends to use in determining the assignment of Violation Risk Factors ("VRFs") and Violation Severity Levels ("VSLs") for NERC Reliability Standards. NERC is making this filing to report on the actions NERC has taken in response to the discussions in Paragraphs 45 and 46 of the Federal Energy Regulatory Commission's ("FERC") March 20, 2009, Order No. 722 regarding the development of "a new and comprehensive approach that would better facilitate the assignment of violation severity levels and violation risk factors." This filing also explains how the revised guidelines are consistent with previous FERC expectations and guidance.

NERC's informational filing consists of the following:

- This transmittal letter;
- A table of contents for the entire filing;

- A narrative description explaining NERC's revised VRF and VSL Development Guidelines;
- An informational copy of these Guidelines (Exhibit A); and
- A series of examples, showing the application of these Guidelines to existing standards. (**Exhibit B**).

Please contact the undersigned if you have any questions.

Respectfully submitted,

/s/ Rebecca J. Michael

Rebecca J. Michael Attorney for North American Electric Reliability Corporation

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

NORTH AMERICAN ELECTRIC	)
RELIABILITY CORPORATION	)

# INFORMATIONAL FILING OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION REGARDING THE ASSIGNMENT OF VIOLATION RISK FACTORS AND VIOLATION SEVERITY LEVELS

Rick Sergel
President and Chief Executive Officer
David N. Cook
Vice President and General Counsel
North American Electric Reliability
Corporation
116-390 Village Boulevard
Princeton, NJ 08540-5721
(609) 452-8060
(609) 452-9550 – facsimile
david.cook@nerc.net

Rebecca J. Michael
Assistant General Counsel
Holly A. Hawkins
Attorney
North American Electric Reliability
Corporation
1120 G Street, N.W.
Suite 990
Washington, D.C. 20005-3801
(202) 393-3998
(202) 393-3955 – facsimile
rebecca.michael@nerc.net
holly.hawkins@nerc.net

September 10, 2009

#### TABLE OF CONTENTS

I.	INTRODUCTION	. 1
II.	NOTICES AND COMMUNICATIONS	. 2
III.	BACKGROUND	. 2
IV.	SUMMARY OF REVISED GUIDLEINES	. 5
	a.) Structure and Formatting of Requirements.	. 6
	b.) Violation Risk Factors	. 7
	c.) Violation Severity Levels	. 8
	d.) Application to Existing Standards	. 9
V.	BENEFITS OF REVISED GUIDELINES	11
	a.) Consistency with Existing VSL Guidelines	11
	b.) Consistency with Sanctions Guidelines	11
	c.) Consistency with the Energy Policy Act of 2005	12
	d.) Consistency with FERC Guidelines for VSLs and VRFs	12
	e.) Consistency with FERC Guidelines for Approval of Standards	12
	f.) Reduces Industry Concerns with Double Jeopardy	13
	g.) Reduces Industry Concerns with Inappropriate Sanctions	14
	h.) Reduces Resource Needs for Drafting and Administration	14
VII.	CONCLUSION	14
Exhi	bit A - VSL and VRF Development Guidelines Criteria	
Exhi	bit B - Example VSL Assignments	

#### I. INTRODUCTION

The North American Electric Reliability Corporation ("NERC") hereby submits an informational filing setting forth a summary of revised guidelines be used in determining the assignment of Violation Risk Factors ("VRFs") and Violation Severity Levels ("VSLs") for NERC Reliability Standards. NERC is making this filing to report on the actions NERC has taken in response to the discussion in Paragraphs 45 and 46 of the Federal Energy Regulatory Commission's ("FERC") March 20, 2009, Order No. 722 regarding the development of "a new and comprehensive approach that would better facilitate the assignment of violation severity levels and violation risk factors." In those paragraphs, FERC encouraged NERC to develop a new and comprehensive approach that would better facilitate the assignment of VRFs and VSLs both for new Reliability Standards and for existing Reliability Standards.¹ This filing also explains how the revised guidelines are consistent with previous FERC expectations and guidance. NERC filed this informational filing with FERC on August 10, 2009, and also is providing this informational filing to the other applicable governmental authorities in Canada.

VRFs assess the impact to reliability of violating a specific requirement. VSLs define the degree to which compliance with a requirement was not achieved in a particular instance. VSLs, in conjunction with VRFs, are used in the determination of the base penalty range for a violation of a Reliability Standard requirement as set forth in the NERC Sanction Guidelines. While FERC has previously required that each requirement and sub-requirement have a VRF and a set of VSLs, FERC has invited NERC to develop an alternative, more comprehensive approach to assigning VRFs and VSLs. In response, NERC has developed a new approach to assigning VRFs and VSLs that (1) applies a

<sup>1</sup> *Id.* at P 45.

single VRF to a requirement and its sub-parts and (2) applies a single comprehensive set of VSLs to categorize noncompliance with the main requirement and the components that contribute to the main requirement. This new approach ensures consistency in the determination of sanctions. It provides clarity for the users, owners and operators of the bulk power system, and provides increased effectiveness in administration and oversight of the standards. This filing explains NERC's revised, comprehensive approach to the assignment of VRFs and VSLs both prospectively and to existing Reliability Standards.

#### II. NOTICES AND COMMUNICATIONS

Notices and communications with respect to this filing may be addressed to the following:

Rick Sergel
President and Chief Executive Officer
David N. Cook
Vice President and General Counsel
North American Electric Reliability Corporation
116-390 Village Boulevard
Princeton, NJ 08540-5721
(609) 452-8060
(609) 452-9550 – facsimile
david.cook@nerc.net

Rebecca J. Michael
Attorney
Holly A. Hawkins
Attorney
North American Electric Reliability
Corporation
1120 G Street, N.W.
Suite 990
Washington, D.C. 20005-3801
(202) 393-3998
(202) 393-3955 – facsimile
rebecca.michael@nerc.net
holly.hawkins@nerc.net

#### III. <u>BACKGROUND</u>

NERC's original Version 0 Reliability Standards contained Levels of Non-Compliance. As NERC prepared to implement the mandatory Reliability Standards, NERC explained in its *Reliability Standards Development Plan:* 2007-2009 that the

Reliability Standards' Levels of Non-Compliance would be replaced by Violation Risk Factors and Violation Severity Levels. NERC proposed to use Levels of Non-Compliance in the interim until the development plan projects were completed.

NERC submitted the VRFs in filings dated April 12, 2007 and June 8, 2007.

Complete VRFs and VSLs for all Reliability Standards were submitted on July 8, 2009.

On June 19, 2008, FERC approved the VSLs proposed by NERC and stated general support for NERC's VSL guidelines but provided additional guidelines for NERC's consideration when developing VSLs.<sup>2</sup> FERC also directed NERC to review the approved set of VSLs using FERC's additional guidelines, and submit various reports within six months on the analysis, including any proposed changes to the VSLs that resulted. FERC further directed that the VSLs assigned to a small number of requirements be changed, within 30 days, to comport with FERC's VSL language.<sup>3</sup>

NERC filed a timely motion for clarification or, in the alternative, rehearing on several issues with respect to the June 19, 2008 order, including several of the proposed VSL changes and the timing for the delivery of the reports directed in the order. FERC agreed to extend the delivery of the reports, except for the assignment of VSLs to binary "pass/fail" type requirements, to September 18, 2009. NERC subsequently filed changes to the VSLs for binary requirements on December 19, 2009, assigning them at the "Severe" level.

Coincident with this activity, on July 11, 2008, NERC filed three revised Reliability Standards (FAC-010-2, FAC-011-2 and FAC-014-2). In the development of those standards, NERC utilized a different approach for the associated VSLs, assigning

<sup>&</sup>lt;sup>2</sup> North American Electric Reliability Corporation, "Order on Violation Severity Levels Proposed by the Electric Reliability Organization," 123 FERC ¶ 61,284 (2008).

<sup>&</sup>lt;sup>3</sup> *Id.* at P 1.

them on a per-requirement basis. That is, one set of VSLs was developed for each main requirement that included all component parts (commonly referred to as "subrequirements"), rather than assigning each sub-requirement a separate set of VSLs. In its October 16, 2008 Notice of Proposed Rulemaking ("NOPR") for the Version 2 FAC standards, FERC observed that each sub-requirement had not been assigned a VSL contrary to prior FERC guidance on the matter.<sup>4</sup> As a result, FERC proposed to assign separate binary VSLs to all sub-requirements. In NERC's response to the NOPR, NERC explained that all sub-requirements had been taken account of in the VSLs but that they were included in the main requirement VSL set. Further, NERC discussed how the assignment of VSLs to binary requirements and the associated main requirement created opportunities for confusion by those expected to comply with the standards. NERC stated such an approach was inconsistent with FERC's criteria for standard approval articulated in Order No. 672 that "[t]he possible consequences, including range of possible penalties, for violating a proposed Reliability Standard should be clear and understandable by those who must comply." 5 NERC explained that, in the event that an applicable entity violated a sub-requirement, the entity did not clearly understand whether the base penalty amount would be determined using the set of VSLs and associated VRF for the sub-requirement, or for the main requirement, or potentially be faced with two penalties for a violation of the sub-requirement and main requirement, referred to as "double jeopardy."

<sup>&</sup>lt;sup>4</sup> Version Two Facilities Design, Connections and Maintenance Reliability Standards, ("Notice of Proposed Rulemaking"), 125 FERC ¶ 61,040 (2008).

<sup>&</sup>lt;sup>5</sup> Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards, ("Order No. 672"), 114 FERC ¶ 61,104 at P 326 (2006).

In Order No. 722 issued on March 20, 2009, FERC directed to the ERO to take actions consistent with those proposed in the NOPR, but encouraged NERC to "develop a new and comprehensive approach that would better facilitate the assignment of violation severity levels and violation risk factors both prospectively and to existing, Commission-approved Reliability Standards." FERC stated that such an approach should "include a more detailed description of the proposal to assign violation severity levels for main requirements that would apply to sub-requirements, as well as the specific condition under which its application would or would not be appropriate." Additionally, FERC stated that this approach also should be applied to VRFs. FERC also noted that the individual circumstances of a particular violation would be considered by the Compliance Enforcement Authority to determine an appropriate penalty that is commensurate with the violation, so there was no "double jeopardy" concern.

This informational filing responds to FERC's invitation to develop a more comprehensive approach for assigning VRFs and VSLs. Integral to this approach is a revised set of *Guidelines for Violation Risk Factors and Violation Severity Levels* ("Guidelines") that is included as **Exhibit A** to this filing. NERC already is using these revised guidelines with respect to the assignment of VSLs and VRFs applicable to the Reliability Standards.

#### IV. SUMMARY OF REVISED GUIDLEINES

The revised Guidelines address three key areas: (i) the structure and formatting of requirements, (ii) the assignment of VRFs and (iii) the assignment of VSLs. Importantly,

<sup>&</sup>lt;sup>6</sup> Order No. 722 at P 45.

<sup>&</sup>lt;sup>7</sup> *Id.* at P 46 (footnote omitted).

the Guidelines discuss how to properly address VRFs and VSLs for existing Reliability Standards.

#### a.) Structure and Formatting of Requirements

Consistent with the formatting in NERC's existing Reliability Standards, NERC will continue to identify "main requirements" (requirements at the top level of a hierarchy) with the abbreviation "R," followed by an integer value. For example:

- R1 This is the first "main requirement."
- R2 This is the second "main requirement."

Going forward, however, "components" that contribute to the achievement of the reliability objective of the main requirement, but that individually do not achieve a reliability objective separate from the main requirement, will be identified with only the integer value of the main requirement, followed by a period and one or more sequenced integers. NERC will refrain from using the previously-employed term "sub-requirements" to reinforce that the "components" are part of the main requirement and do not achieve a reliability objective separate from the main requirement. This is a departure from NERC's historical approach and reflects an updated and improved method to identify the main requirement and its components as a composite set of actions to achieve a singular reliability objective. For example:

- R1 This is the first "main requirement."
  - 1.1 This is the first "component" that contributes to the first "main requirement."
  - 1.2 This is the second "component" that contributes to the first "main requirement."
- R2 This is the second "main requirement."
  - 2.1 This is the first "component" that contributes to the second "main requirement."
    - 2.1.1 This is the first "sub-component" that contributes to the first "component" of the second "main requirement."

- 2.1.2 This is the second "sub-component" that contributes to the first "component" of the second "main requirement."
- 2.2 This is the second "component" that contributes to the second "main requirement."

In certain cases, components may reflect a list of options that may be undertaken to achieve compliance with the main requirement. In this case, the list of options will be bulleted instead of numbered. For example:

- R1 This is the first "main requirement."
  - This is one "option" that can be used to satisfy the "main requirement."
  - This is a second "option" that can be used to satisfy the "main requirement."
- R2 This is the second "main requirement."
  - 2.1 This is the first "component" that contributes to the second "main requirement."
    - This is one "option" that can be used to satisfy the first "component" of the second "main requirement."
    - This is a second "option" that can be used to satisfy the first "component" of the second "main requirement."
  - 2.2 This is the second "component" that contributes to the second "main requirement."

NERC does not intend to modify its existing Reliability Standards to use this new formatting and structure if these changes are the only ones contemplated for a particular Reliability Standard. Rather, NERC will modify such Reliability Standards with the new formatting structure when a project is initiated to review and modify a standard as part of a set of more substantive changes.

#### **b.**) Violation Risk Factors

The VRF assesses the impact to reliability of violating a specific requirement.

Each main requirement must have an associated VRF. When a main requirement includes components that contribute to a specific reliability outcome or deliverable, the main requirement will be assigned a single VRF that considers the main requirement and its components in their entirety. Components of requirements that contribute to the

reliability outcome or deliverable of the main requirement, options for complying with a given requirement, and explanatory text are not assigned individual or separate VRFs.

VRFs are defined in NERC's *Reliability Standards Development Procedure*.

VRF definitions currently in effect at this time are Lower, Medium and High.

#### c.) Violation Severity Levels

VSLs define the degree to which compliance with a requirement was not achieved. VSLs are defined in NERC's *Reliability Standards Development Procedure* as well. VSL definitions currently in effect are Lower, Moderate, High and Severe.

Every main requirement will have a set of VSLs that includes from one to four possible levels. Not all requirements will have multiple levels. The determination of whether a requirement has a single VSL assignment or a set of VSLs is made by analyzing the performance required to satisfy a particular requirement.

- Requirements with Gradated Performance If there are degrees of
  noncompliance that result in performance that partially meets the reliability
  objective of the requirement such that the performance or product has some
  reliability-related value, then the requirement will have multiple VSLs that
  address a range of severity utilizing two or more of the four VSL categories.
- Requirements that are "Pass/Fail" If the required performance cannot be
  broken down to categorize degrees of noncompliant performance that at least
  partially meet the reliability objective of the requirement, any noncompliance
  with the requirement will have only one VSL Severe.

<sup>&</sup>lt;sup>8</sup> NERC's Rules of Procedure also include an alternate procedure in the event the Standards Development Process does not produce the needed VRFs in a timely manner.

In some cases, missing a single component of a requirement that has multiple components will result in noncompliant performance that almost fully meets the reliability-related objective of the requirement, meeting the criteria for a Lower VSL. However, in other cases, missing a single component of the required performance may result in a product or performance that has only limited reliability value, resulting in a Moderate or High VSL – or may result in a product or performance that has no value, thus meeting the criteria for a Severe VSL.

Some requirements have many components, and in situations where meeting the required performance for some, but not all of the components results in performance that at least partially achieves the reliability objective of the requirement, then multiple VSLs will be developed. Where a requirement has numbered components, each numbered component will be clearly identified in at least one of the VSLs so that noncompliance with each of the components in support of the main requirement is clearly defined.

Where a main requirement does not have multiple components and there is no gradation in the required performance, then a failure to meet the required performance will be assigned a Severe VSL.

#### d.) Application to Existing Standards

While many Reliability Standards have requirements that address a single, reliability-related performance or outcome, there are some requirements in existing standards that include multiple performance objectives or multiple outcomes, and consequently require more than one VRF. Until NERC can remedy these situations through its standards development process, it is necessary to apply a "transitional" methodology to ensure that compliance efforts are consistent with the intent of both the

original standards and the Sanction Guidelines. Today, a set of VRFs and VSLs has been developed by NERC for each requirement and sub-requirement. In its September 18, 2009 compliance filing for VSLs in which NERC will provide its analysis of the VSLs relative to FERC's supplemental guidelines, NERC intends to employ the following approach.

In all cases, a set of VSLs will be assigned to the main requirement (*i.e.*, the Requirement with the primary level of outlined numbering, *e.g.*, R1, R2, R3, *etc.*). In cases where underlying components of the main requirement contribute to the reliability objective of the main requirement, no VSLs will be assigned directly to the underlying component, and the component will be incorporated into the VSLs specified for the main requirement. In cases where a component does not contribute to the reliability objective or the main requirement but achieves a separate objective, VSLs will be assigned directly to the component. In these cases, the component will be treated like a separate requirement, and the component will *not* be incorporated directly or by reference into the VSLs specified for the main requirement. In other words, the component will be treated as if it were a separate main requirement.

In situations where there is a requirement with multiple components, and the main requirement and each of its components has been assigned a VRF, but only the main requirement has been assigned a set of VSLs, the Compliance Enforcement Authority will use judgment to determine which VRF shall apply, based on the components involved in a given violation. For example, a Reliability Standard has a main requirement with a Medium VRF and three components, one of which is assigned a Medium VRF and two of which are assigned a High VRF, if there is a violation of a

component that is assigned a Medium VRF, the Compliance Enforcement Authority would be expected to apply a Medium VRF rather than a High VRF. Similarly, if the violation was associated with a component that had a High VRF, the Compliance Enforcement Authority would be expected to apply a High VRF.

#### V. BENEFITS OF REVISED GUIDELINES

These revised Guidelines provide several benefits to the NERC process, including: (i) greater consistency, (ii) improved clarity to users, owners and operators of the bulk power system, and (iii) increased effectiveness in administration and oversight.

#### a.) Consistency with Existing VSL Guidelines

The revised Guidelines contain the same core information that was provided in the original informational VSL Guidelines set forth in NERC's July 11, 2008 FAC standards `filing. These revised guidelines incorporate lessons learned from the application of the original guidelines, address more fully the development of VSLs for complex, "multi-component" requirements, and explain the manner in which existing requirements will be addressed. Further, these revised guidelines incorporate FERC guidance on the assignment of VSLs received in previous Orders, ensuring that developed VSLs are consistent with that guidance.

#### b.) Consistency with Sanctions Guidelines

Section 3.8 of NERC's Sanction Guidelines states that "Penalties, sanctions, and remedial actions levied or applied for the violation of a reliability standard shall bear a reasonable relation to the seriousness of the violation while also reflecting consideration of the factors that these guidelines direct to take into account." By holistically addressing the severity of a violation through the VSL assignment at the main requirement level, the

11

determination of a base penalty amount is simplified and intended necessarily to be more reflective of the severity of the violation. This results in greater clarity for both the enforcement authority and the users, owners, and operators held to compliance with the requirements.

#### c.) Consistency with the Energy Policy Act of 2005

The Energy Policy Act of 2005 requires that "Any penalty imposed ... shall bear a reasonable relation to the seriousness of the violation..." As discussed in Section V.b. and consistent with this direction, the revised Guidelines help ensure that such reasonableness is accomplished. By providing a consistent method for assigning VRFs and VSLs to a requirement established within a standard, the Guidelines appropriately ensure that sanctions levied are consistent with the intent of the requirement at the time of its drafting.

#### d.) Consistency with FERC Guidelines for VRFs and VSLs

These revised Guidelines incorporate FERC guidance given to NERC regarding VRFs and VSLs. NERC intends that all drafting teams will comply with these guidelines when developing VRFs and VSLs. NERC believes its revised Guidelines document supports FERC's goals with regard to the assignment of VRFs and VSLs.

#### e.) Consistency with FERC Guidelines for Approval of Standards

FERC Order No. 672 requires that NERC's reliability standards, among other things, "be clear and unambiguous regarding what is required and who is required to comply" and "[t]he possible consequences, including range of possible penalties, for violating a proposed Reliability Standard should be clear and understandable by those

<sup>10</sup> Order No. 672 at P 325.

<sup>&</sup>lt;sup>9</sup> H.R.6, Energy Policy Act of 2005, Section 215, Paragraph e, subparagraph 6.

who must comply."<sup>11</sup> By standardizing the structure and formatting of a requirement, these Guidelines aid in making it clear to an entity what is required by each requirement, and what possible penalty actions will ensue should the requirement be violated.

In particular, the application of the revised Guidelines eliminates the ambiguity that currently exists when main requirements and its various components are each assigned VRFs and individual sets of VSLs. The applicable entity is not currently clear how the determination of sanctions is originally established for the violation of a component of a main requirement. Questions from the industry participants on this matter include: will the VSL and VRF for the component be used for the initial determination of base penalty amount or will the VRFs and VSLs for the main requirement be used? The revised Guidelines remove this ambiguity and thereby better support FERC's criteria for approving Reliability Standards it articulated in Order No. 672.

#### f.) Reduces Industry Concerns with Double Jeopardy

Industry participants in the NERC standards development process have expressed concern that the current approach for defining VRFs and VSLs may result in cases where a single violation could result in multiple sanctions. In the case where a main requirement and its individual components are each assigned their own VRFs and VSLs, any time a component is violated, registered entities express concern that an entity could be penalized both for the violation of the component and the violation of the main requirement for the same occurrence. While the Compliance Enforcement Authority has discretion in proposing sanctions, the perception of the industry is that a single action can inappropriately result in penalties in excess of those expected for a single violation.

-

<sup>&</sup>lt;sup>11</sup> *Id.* at P 326.

Implementing the proposed Guidelines helps reduce the potential for such actions occurring by developing a set of VSLs that incorporates the main requirement and all component parts and by making it clear to the industry that sanctions will bear a reasonable relation to the seriousness of the violation.

#### g.) Reduces Industry Concerns with Inappropriate Sanctions

Industry participants in the NERC standards development process have also expressed concern that the current approach for defining VRFs and VSLs may result in cases where a single violation can result in inappropriate sanctions based on the structure of the requirement. If a multi-component requirement is treated such that each component is assigned its own VRF and VSL, then the size of the penalty or sanction assigned for noncompliance is directly related to the number of components in the requirement and may not necessarily bear a relationship to the reliability-related impact of noncompliance. The updated approach reduces stakeholder concerns that the formatting of a particular requirement can lead to inappropriate sanctions determinations.

#### h.) Reduces Resource Needs for Drafting and Administration

Assigning VRFs and VSLs has no direct affect on reliability, but is rather an issue of compliance administration. Application of these Guidelines will more appropriately focus standards development work on reliability issues associated with developing high quality standards with clear and enforceable requirements.

#### VII. <u>CONCLUSION</u>

NERC is making this filing to report on the actions NERC has taken in response to the discussion in Order No. 722 regarding the development of "a new and comprehensive approach that would better facilitate the assignment of violation severity

levels and violation risk factors." This filing also explains how the revised guidelines are consistent with previous FERC expectations and guidance.

NERC is providing a detailed explanation of how it will apply VRFs and VSLs to "main requirements" on all future standards filings, incorporating the components that contribute to the "main requirement" in the VSL for that "main requirement." In future standards, NERC will no longer utilize "sub-requirements" with individual VRFs and VSLs. NERC has also developed guidelines describing how this approach will be applied to existing Reliability Standards having sub-requirements with separate VRFs. NERC will modify such Reliability Standards with the new formatting structure when a project is initiated to review and modify a standard as part of a set of more substantive changes.

NERC is not requesting action with regard to the revised guidelines or the process described herein.

Respectfully submitted,

Rick Sergel
President and Chief Executive Officer
David N. Cook
Vice President and General Counsel
North American Electric Reliability Corporation
116-390 Village Boulevard
Princeton, NJ 08540-5721
(609) 452-8060
(609) 452-9550 – facsimile
david.cook@nerc.net

/s/ Rebecca J. Michael
Rebecca J. Michael
Assistant General Counsel
Holly A. Hawkins
Attorney
North American Electric Reliability
Corporation
1120 G Street, N.W.
Suite 990
Washington, D.C. 20005-3801
(202) 393-3998
(202) 393-3955 – facsimile
rebecca.michael@nerc.net
holly.hawkins@nerc.net

#### Exhibit A

# Guidelines for Developing Violation Risk Factors and Violation Severity Levels





## Guidelines for Developing Violation Risk Factors and Violation Severity Levels

the reliability of the bulk power system

August 10, 2009

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

### **Table of Contents**

Introduction	1
Structure and Formatting of Requirements	2
Violation Risk Factors (VRFs)	3
Violation Severity Levels	6
Applying Violation Severity Levels	8
Applying VSLs for Main Requirements without Components	9
Setting VSLs for Requirements with Pass/Fail Performance	9
Setting VSLs for Requirements with Graded Performance	9
Applying VSLs for Main Requirements with Components	12
Setting VSLs for Multi-Component (Graded Performance) Requirements	12
Setting VSLs for Multi-Component (Graded Performance) Requirements	12
Developing VSLs for Complex Multi-component Graded Requirements	13
Application to Legacy Standards	17
Requirements with Multiple VRFs Assigned	17
Requirements and Sub-requirements Without a VRF Assigned	17

#### Introduction

From time to time it becomes necessary for NERC to update guidelines given to its Standards Drafting Teams as NERC continues to improve its effectiveness and performance as the ERO. This updated Guidelines document describes the process for assigning Violation Severity Levels (VSLs) to requirements and provides an explanation of the relationship between Violation Risk Factors (VRFs) and VSLs. It is intended to apply the various "lessons learned" in assigning VRFs and VSLs, develop a clear and comprehensive approach toward assigning these compliance elements moving forward, and as a result, make more effective the reliability standards development process.

Nothing in this document replaces the definitions of VRFs or VSLs currently contained within NERC's Rules of Procedure. Rather, with regard to VRFs, this document explains the relationship between requirements and associated VRFs, with particular emphasis on the concept of a complex requirement made up of several components that each contribute to a single reliability outcome or deliverable that, in turn, is assigned a single VRF.

Additionally, the document provides guidance regarding the assignment of VSLs to categorize various degrees of noncompliant performance, representing the degree to which compliance with a reliability objective of a requirement was not achieved. NERC as the Compliance Enforcement Authority uses the assigned VRF and a single set of VSLs to define a starting point to determine an appropriate penalty amount for the violation of a requirement

These guidelines apply to the development of VRFs and VSLs for all future standards. Additionally, this document provides information regarding how existing "legacy" standards are to be processed with regard to VRFs and VSLs.

#### **Structure and Formatting of Requirements**

Each requirement is developed to achieve a single reliability-related performance outcome or objective. Each requirement, and its associated components, will have a single VRF and a single set of VSLs assigned to it. Components of the main requirement each contribute to the Requirement, and represent actions or deliverables that must be undertaken to satisfy the main Requirement. These components will be identified *without* the preceding "R", a departure from historical practice, but will otherwise retain the "outline" type numbering scheme currently used. For example, the structure of a main requirement and its components will have the following form:

- R1. Required performance shall include the following:
  - 1.1. First component
  - 1.2. Second component
  - 1.3. Third component

Where a requirement includes mandatory performance, and the components are not mandatory, but rather are acceptable choices or options, these components will not be numbered; instead, the descriptions of the acceptable methods will be bulleted and presented as a menu of options. For example:

- R2. Required performance shall be achieved through one of the following:
  - Option 1
  - Option 2

In this example, one single Requirement, R2, has been identified, followed by a list of options representing the actions that could be taken by an entity to comply with the main Requirement. It is expected in this example that the entity will choose only one of the two options; however, drafting teams may specify explicit rules for a given Requirement (e.g., the entity must implement any two of the four options).

#### **Violation Risk Factors (VRFs)**

The VRF assesses the impact to reliability of violating a specific requirement. 12

The three Violation Risk Factors currently used are as follows:

A High Risk Factor requirement (a) is one that, if violated, could directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures; or (b) is a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures, or could place the bulk power system at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

A Medium Risk Factor requirement (a) is a requirement that, if violated, could 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.

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.

Each main requirement must have an assigned VRF. When a main requirement includes components that contribute to the specific reliability outcome or deliverable of the main requirement, the main requirement will be assigned a

3

-

<sup>&</sup>lt;sup>12</sup> A complete description of how a VRF is used as a factor in determining a penalty or sanction can be found in the ERO Rules of Procedure.

single VRF that considers the main requirement and its components in their entirety. In this case, components of main requirements or options for complying with a given requirement are not assigned individual VRFs.

In its May 18, 2007 Order on Violation Risk Factors in response to NERC's initial submission of proposed VRFs, FERC identified five "guidelines" used to determine whether to approve the proposed VRFs for a particular standard. Note that NERC did not develop a distinctive set of guidelines for assigning VRFs when it filed VRFs in its original submission. FERC's guidelines and associated commentary from the May 18, 2007 Order are:

## Guideline (1) — Consistency with the Conclusions of the Final Blackout Report

The Commission seeks to ensure that Violation Risk Factors assigned to Requirements of Reliability Standards in these identified areas appropriately reflect their historical critical impact on the reliability of the Bulk-Power System. Footnote 15 of the May 18, 2007 Order lists the critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System. These areas include:

- Emergency operations
- Vegetation management
- Operator personnel training
- Protection systems and their coordination
- Operating tools and backup facilities
- Reactive power and voltage control
- System modeling and data exchange
- Communication protocol and facilities
- Requirements to determine equipment ratings
- Synchronized data recorders
- Clearer criteria for operationally critical facilities
- Appropriate use of transmission loading relief.]

# Guideline (2) — Consistency within a Reliability Standard The Commission expects a rational connection between the Violation Risk Factor assignments within a Standard, especially when compliance with one requirement impacts the ability to comply with another requirement.

Guideline (3) — Consistency among Reliability Standards

The Commission expects the assignment of Violation Risk Factors corresponding to Requirements that address similar reliability goals in different Reliability Standards would be treated comparably.

Guideline (4) — Consistency with NERC's Definition of the Violation Risk Factor Level

Guideline (4) was developed to evaluate whether the assignment of a particular Violation Risk Factor level conforms to NERC's definition of that risk level.

Guideline (5) — Treatment of Requirements that Co-mingle More Than One Obligation

Where a single Requirement co-mingles a higher risk reliability objective and a lesser risk reliability objective, the VRF assignment for such Requirements must not be watered down to reflect the lower risk level associated with the less important objective of the Reliability Standard.

#### **Violation Severity Levels**

VSLs define the degree to which compliance with a requirement was not achieved. Four categories of VSLs exist: Lower, Moderate, High, and Severe. Each requirement must have at least one VSL. While it is preferable to have a set of four VSLs for each requirement, some requirements do not have multiple "degrees" of noncompliant performance and may have only one, two, or three VSLs, depending on whether partial compliance contributes to the reliability-related objective of the requirement. Each requirement should have a set of VSLs that categorizes noncompliant performance with the requirement, in it's entirety, including all mandatory components.

In general, violation severity levels should be assigned based on the categories shown in the table below:

Lower VSL	Moderate VSL	High VSL	Severe VSL
The performance or product measured almost meets the full intent of the requirement.  Therefore, despite not being fully in compliance, the applicable entity still strongly contributes to achieving reliability through partially meeting the requirement.	The performance or product measured meets the majority of the intent of the requirement.  Therefore, despite not being fully in compliance, the entity still moderately contributes to achieving reliability through partially meeting the requirement.	The performance or product measured does not meet the majority of the intent of the requirement, but does meet some of the intent.  With regard to the requirement, the entity has contributed to achieving reliability in a limited way.	The performance or product measured does not substantively meet the intent of the requirement.  With regard to the requirement, the applicable entity has not contributed to achieving reliability in any significant way.

Additionally, the following guidelines also apply in assigning VSLs:

- Every main requirement must have at least one VSL if a VRF is assigned to it.
- Not all requirements need to have multiple VSLs.
- If a requirement is a "pass or fail" ("binary") type of requirement, then a "failure" represents a reliability outcome that does not substantively meet the intent of the requirement. Accordingly, a violation of that requirement is to be assigned a Severe VSL.
- If a requirement has a range of noncompliant performance that can be measured and for which an entity's performance partially meets the intent of the requirement, then multiple VSLs should be assigned for that requirement.

- If a main requirement has several components, and all components contribute equally to the reliability-related objective of the main requirement, then there should be a set of VSLs that categorize noncompliant performance either by the number of assigned components not achieved or by the % of performance that was noncompliant. If percentages are used, the default thresholds for noncompliance are 5% or less Lower; more than 5% but up to (and including)10% Moderate; more than 10% up to (and including) 15% High; and more than 15% Severe. Other percentages may be acceptable in some circumstances.
- If a main requirement has several components, and the components contribute in varying degrees to the reliability-related objective of the main requirement, then noncompliance with each of the components should be clearly identified in at least one of the VSLs assigned to the main requirement.

In its June 19, 2008 <u>Order on Violation Severity Levels</u>, FERC indicated it would use the following four guidelines for determining whether to approve VSLs:

Guideline 1: Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance

Compare proposed VSLs to any Levels of Non-compliance used previously to aid in compliance monitoring and avoid a VSL structure that encourages a lower level of compliance than was historically required.

Guideline 2: Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties

All violations of "binary" or "pass/fail" type requirements must be consistently assigned the same VSL. NERC utilizes a "Severe" VSL assignment for binary requirements.

Do not use ambiguous terms such as "minor" and "significant" to describe noncompliant performance.

Guideline 3: Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement

VSLs should not expand on, nor detract from, what is required in the requirement.

Guideline 4: Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations

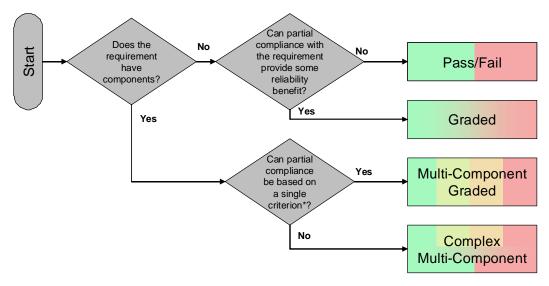
. . . unless otherwise stated in the requirement, each instance of non-compliance with a requirement is a separate violation. Section 4 of the Sanction Guidelines states that assessing penalties on a per violation per day basis is the "default" for penalty calculations.

#### **Applying Violation Severity Levels**

VSLs are generally established based on two concepts:

- Requirements with Pass /Fail Performance: The requirement has no allowance for partial compliance — either the requirement is met in its entirety, or it is not met in its entirety. Performance with the requirement is therefore "pass fail" and there should be a single VSL for the requirement — Severe.
- Requirements with Graded Performance: The main requirement has a
  measurable range of noncompliant performance in which the intent of the
  requirement can be partially met. Therefore, the requirement can be
  graded based on partial compliance and a set of VSLs for the requirement
  should be developed.

The sections below describe how to use these two concepts to develop VSLs. In some cases, the VSLs may be relatively simple; in others, they may be extremely complex. The flowchart below summarizes a decision process for choosing the appropriate method for assigning VSLs:



<sup>\*</sup>For example, a single percentage, or a quantity of components that have been complied with.

Drafting teams should recognize that there is may not be a single "right answer" for determining VSLs; the team must use its judgment in proposing a set of VSLs that appropriately captures the range of non-compliant performance.

#### Applying VSLs for Main Requirements without Components

#### Setting VSLs for Requirements with Pass/Fail Performance

The Pass/Fail category establishes a classification of criteria for requirements that cannot be judged for partial compliance; either the requirement was met (Passed) or the requirement was not met (Failed). This category is applied to very specific requirements that have binary outcomes, where a failure to comply results in an outcome which has no value toward achieving the reliability goal of the requirement. Accordingly, when a Pass/Fail requirement is violated, the only appropriate VSL is a "Severe."

Some generic examples for "Pass/Fail" requirements are:

Whether or not a Responsible Entity took action.	For example, if a requirement states that an entity must notify its Reliability Coordinator if it can't balance its load and generation VSL would be as follows: Severe: The responsible entity could not balance its load and generation and it did not notify its Reliability Coordinator.
Whether or not a Responsible Entity produced a deliverable.	For example, if a requirement states that an entity must have a plan for automatic load shedding, it might be appropriate to specify a VSL as follows: Severe, did not have a plan for automatic load shedding.

#### **Setting VSLs for Requirements with Graded Performance**

Requirements can be assigned VSLs for "graded performance" where a measurable range of compliant performance exists, that is, where partial compliance contributes to the reliability-related objective of the requirement. Examples of the types of requirements that fall into this category include:

- Requirements that define specific deliverables that can be measured for timeliness or completeness
- Requirements that specify sets of actions to be taken under specified conditions that can be measured for timeliness or correct action
- Reporting requirements that can be measured for timeliness or completeness
- Communication and coordination requirements that can be measured for timeliness or completeness
- Numeric performance metrics that can be specified through a range of values.
- Requirements with multiple components that can be measured for completeness against the complete set of components

In general, if partial compliance can result in an outcome that has some value toward achieving the reliability objective of the main requirement, use of the graded performance approach to setting VSLs is appropriate.

Requirements subject to graded performance will have two or more VSLs assigned to the main requirement. The set of VSLs should collectively address the full range of expected noncompliant performance for the requirement and its components.

As a starting point, the fundamental question that needs to be considered is the threshold point that qualifies as "Severe" particularly for numerical and percentage type requirements. This would then form the basis for categorizing the graded performance across the spectrum of VSLs as is outlined in the third example below. In this example, 15% is the chosen as the Severe point – meaning that if more than 15% of an entity's ratings were inaccurate, then the performance is so noncompliant that the performance rates a Severe VSL. Consideration also needs to be given in this regard to Commission's guideline 1 that speaks to the relation between the proposed range of VSLs and established performance thresholds used previously in NERC's standards.

Some generic examples of VSL assignments that could be categorized as "graded performance" requirements are:

Elapsed time since a deadline.	If a requirement says that an action must occur at midnight, it might be appropriate to set thresholds for VSLs as follows:	
	<ul> <li>Lower: after midnight but not after 1am;</li> </ul>	
	<ul> <li>Moderate: 1 am or after but not after 2am;</li> </ul>	
	High: 2am or after, but not after 3am; and	
	Severe: after 3am or no action taken.	
Distributed document to some but not all required entities.	If a requirement states that an entity must distribute its document to a list of entities, it might be appropriate to specify VSLs as follows:	
	<ul> <li>Moderate: failed to distribute the document to one of the required entities;</li> </ul>	
	<ul> <li>High: failed to distribute the document to two of the required entities,</li> </ul>	
	<ul> <li>Severe: did not distribute to three or more of the required entities.</li> </ul>	
Percent of a set that was incorrect, not provided, incomplete, etc	If a requirement states that an entity must have accurate ratings for all their facilities, it might be appropriate to specify VSLs as follows:	
	<ul> <li>Lower: 5% or less ratings were accurate;</li> </ul>	
	Moderate: more than 5% up to (and including) 10%	

of ratings were accurate;
<ul> <li>High: more than 10% up to (and including) 15% of ratings were accurate; and,</li> </ul>
Severe: more than 15% of ratings were accurate.

Providing a set of VSLs that allows categorization of noncompliant performance by referencing either a percentage of noncompliant performance or a fixed number of noncompliant items is acceptable. When developing VSLs based on percentages or numbers, the assigned VSLs must be "size neutral." In some instances, applying a percentage to an entity with a small size may result in grading a violation higher or lower than might be appropriate. Similarly, applying a fixed number to an entity with a large sample size may result in a determination of violation that is higher or lower than might be appropriate. The drafting team must ensure that the appropriate reliability objectives are reinforced by the VSLs, regardless of entity or sample size. For example, if there is a requirement to perform a specific test on a device and one facility owner has 200 of these devices and one facility owner has 15 of these devices, it may be inappropriate to develop a VSL set based solely on percentages. Rather, the following VSL could be developed:

Lower VSL: The responsible entity failed to test 5% or less of its devices, or failed to test 1 device, whichever is greater.

Consultation with NERC Compliance staff may be helpful in determining the best approach for developing VSLs in such situations.

#### Applying VSLs for Main Requirements with Components

#### **Setting VSLs for Multi-Component (Graded Performance) Requirements**

Some main requirements include one or more components that are necessary to fully achieve the singular reliability objective of the main requirement. These are referred to as "multi-component requirements." When evaluating multi-component requirements, a determination must be made as to whether the requirement's components contribute equally to the reliability-related objective of the requirement:

- Where all components contribute equally to achieving the reliabilityrelated objective of the requirement, the VSLs should be assigned either on numerical counts (e.g., missing one of four components) or percentages (e.g., missing 5% of the components).
- Where the components contribute unequally to the reliability-related intent of a main requirement, a set of VSLs will be developed that clearly identifies the impact of noncompliance with each of the specific components.

Some generic examples of VSLs that could be categorized in this fashion are:

Equal Contribution.	If a requirement states that an entity must include the following in its system restoration training program:
	System restoration plan including coordination with the Reliability Coordinator and Generator Operators included in the restoration plan.
	2) Restoration priorities.
	3) Building of cranking paths.
	4) Synchronizing (re-energized sections of the System).
	Each component may be considered as having approximately equivalent value in contributing to the reliability-related intent of the requirement. VSLs should therefore be assigned based on whether the Responsible Entity did not meet a specific number of the listed components (Lower: one of four; Moderate: two of four, etc.)
Unequal Contribution.	If a requirement states that an entity must alert entities of a certain condition by:
	verbally communicating that condition to its Reliability Coordinator; and,
	2.) posting that condition on a web page,
	the verbal communication with the Reliability Coordinator is of greater significance than the posting of the information for other entities. Therefore, the VSL set could include a High and Severe VSL assignment for the failure to verbally communicate but a Lower or Moderate assignment for the failure to perform the web posting.

#### **Developing VSLs for Complex Multi-component Graded Requirements**

In some situations, the simple approach to developing VSLs though percentages or other discrete measures may not be sufficient to truly capture the range of possibilities associated with a violation of the requirement, especially in cases where the requirement has multiple-components of unequal weight contributing to the reliability-related intent of the requirement. In these cases where multiple criteria apply within a single requirement, VSLs should be set so as to describe a full range of noncompliant performance based on those criteria, using a mix of different styles of VSLs that collectively measure the degree to which compliance with a specific reliability objective was not achieved. The mix of VSLs may include the following:

- noncompliance with some components of the requirement may be "pass/fail" and assigned to the Severe VSL category
- noncompliance with some components may be graded on a percentage or per item basis
- noncompliance with some components may be graded such that noncompliance with a specific component is assigned to a specific VSL based on that components contribution to the reliability-related objective of the requirement
- Noncompliance with some components may be graded such that missing a specific number of components results in a specific VSL.

In NERC EOP-001-1 Emergency Operations Planning, Requirement R4<sup>13</sup> defines a complex requirement that has both complex multi-component graded components and pass/fail components. Reformatted to be consistent with this approach, the requirement reads as follows:

- R4. Each Transmission Operator and Balancing Authority shall have emergency plans that will enable it to mitigate operating emergencies. At a minimum, Transmission Operator and Balancing Authority emergency plans shall include:
  - 4.1. Communications protocols to be used during emergencies.
  - 4.2. A list of controlling actions to resolve the emergency. Load reduction, in sufficient quantity to resolve the emergency within NERC-established timelines, shall be one of the controlling actions.
  - 4.3. The tasks to be coordinated with and among adjacent Transmission Operators and Balancing Authorities.
  - 4.4. Staffing levels for the emergency.

<sup>13</sup> Violation Severity Levels are still being developed for this requirement. The VSLs in this example are

included for illustrative purposes only.

The main requirement in this example is that "Each Transmission Operator and Balancing Authority shall have emergency plans that enable it to mitigate operating emergencies." This requirement can be considered a "Pass/Fail" requirement: either the entity has the plan or it does not.

The Requirement also includes several components that contribute to the reliability objective of the deliverable (the plan) specified in the main Requirement.

- 4.1 specifies that the plan must include the "communications protocols to be used during emergencies." While it may be possible to subjectively apply a graded performance analysis to this component based on its completeness, the size and configuration of the entity may result in difficulties assigning such grading. It is therefore more appropriate to treat this component as a "Pass/Fail" item; either the plan contains the protocols or it does not.
- 4.2 specifies that the plan must include a list of "controlling actions." This component can be considered a "Pass/Fail" also; either the plan includes controlling actions or it does not.
- 4.2 also specifies that the plan must include "load reduction" as one of the controlling actions. This component can be considered a "Pass/Fail" as well; either the controlling actions include load reduction or they do not.
- 4.3 specifies that the plan must include the "tasks to be coordinated with and among adjacent Transmission Operators and Balancing Authorities." Like 4.1, while it may be possible to subjectively apply a graded performance analysis to this component based on its completeness. However, because the size of the entity may result in difficulties assigning such grading, it is more appropriate to treat this component as a "Pass/Fail" item; either the plan contains the tasks or it does not.

Lastly, 4.4 specifies that the plan must include "staffing levels for the emergency." This component can be considered a "Pass/Fail" item; either the plan includes staffing levels or it does not.

Analysis of each of these components can be used to assign a Violation Severity levels for each item. Not having a plan at all clearly is an outcome which has no utility; accordingly, a violation of the main requirement R4 (to have a plan) should be treated as a Severe violation.

If the staffing levels specified in 4.4 are not included, the plan likely still retains a significant amount of value toward supporting reliability. Accordingly, missing the staffing level component should result in only a Lower VSL.

If the list of tasks specified in 4.3 are not included, the plan has lost some reliability value – specifically, it may be limited to addressing only concerns that do not impact or can be impacted by neighboring entities. In many cases, this may still lead to an appropriate response during an emergency, and a Moderate VSL is appropriate if this information is not included.

For the remaining two components (4.1 and 4.2), omitting one of the components will significantly impair the reliability value of the plan, but not completely. Additionally, as written, a failure to include load reduction is the same as failing to include 4.2 entirely. As such, missing either one, but not both, of these components, or not including the load reduction in 4.3, leads to a High VSL.

Lastly, if multiple components are missed, then the combined effect of these omissions will significantly degrade the plan's contributions to ensuring reliability. Accordingly, any situation where two or more components are not included can be considered a Severe violation.

Together, these criteria can be combined to create a complex VSL that addresses all potential violations while at the same time evaluating the effect of a violation on meeting the intent of the main Requirement.

Lower	Moderate	High	Severe
The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans do not include component 4.4.	The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans do not include component 4.3.	The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans do not include either component 4.1 or 4.2.	The Transmission Operator or Balancing Authority was unable to demonstrate the existence of emergency plans that would enable it to mitigate operating emergencies. OR
		OR  The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating	The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans are missing two (2) or more of the

Lower	Moderate	High	Severe
		emergencies but the plans do not include load reduction as a part of component 4.2.	listed components: 4.1, 4.2, 4.3, and 4.4. OR
			The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans do not include load reduction as a part of component 4.2, and the plans are also missing one (1) or more of the listed components: 4.1, 4.3, and 4.4.

## **Application to Legacy Standards**

## Requirements with Multiple VRFs Assigned

While many standards have requirements that address a single, reliability-related performance or outcome, there are some requirements and components in existing standards that include multiple performance objectives or multiple outcomes. NERC will remedy these shortcomings appropriately as these existing standards are rewritten or retired. However, until that time, it is necessary to apply a "transitional" methodology to assign a set of VSLs for these multi-objective requirements. To this end, NERC has developed the supplemental guidelines below to address these circumstances:

- In all cases, a set of VSLs will be assigned to the main Requirement (i.e., the Requirement with the primary level of outlined numbering, e.g., R1, R2, R3, etc...).
- In cases where a component contributes to the main Requirement, no specific set of VSLs will be assigned to the component, even in situations where the component has a VRF that is different from the VRF assigned to the main Requirement. The component will be incorporated directly or by reference into the VSLs specified for the main Requirement. In situations where there is a requirement with multiple components, and the main requirement and each of its components has been assigned a VRF, but only the main requirement has been assigned a set of VSLs, the Compliance Enforcement Authority will use judgment to determine which VRF shall apply, based on the components involved in the noncompliant performance..
- In cases where a component does not contribute to the main Requirement but achieves a different reliability objective than the main requirement, a set of VSLs will be assigned to the component directly. The component will be treated as if it were a separate requirement, and will not be incorporated directly or by reference into the VSLs specified for the main Requirement. In some situations, this may result in a main requirement without any VSLs, but each of the associated components will have its own VRF and set of VSLs. The VRFs and VSLs assigned at the component level will be utilized for initial penalty or sanction determination.

## Requirements and Sub-requirements Without a VRF Assigned

In a small number of cases in some existing standards, a requirement or subrequirement may not have an assigned VRF because there is no performance outcome expected or the text is explanatory. In these cases, the subrequirements (components) generally do have VRFs and, in most cases the components should be stand-alone requirements and will be assigned a set of VSLs. In a case where there is a main requirement without a VRF but with subrequirements that do collectively contribute to a single reliability objective, a single set of VSLs will be assigned to the requirement in its entirety.

## Exhibit B

The following selected examples are intended to demonstrate the application of the Guidelines to the existing body of standards. Note that this filing is not intended to request approval of these VSLs and/or VRFs; they are included purely for illustrative purposes.

	Standard Number BAL-001-0 — Real Power Balancing Control Performance					
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change	
Original R1.	The Balancing Authority Area's value of CPS1 is less than 100% but greater than or equal to 95%.	The Balancing Authority Area's value of CPS1 is less than 95% but greater than or equal to 90%.	The Balancing Authority Area's value of CPS1 is less than 90% but greater than or equal to 85%.	The Balancing Authority Area's value of CPS1 is less than 85%.		
Revised R1.	The Balancing Authority Area's value of CPS1 is less than 100% but greater than or equal to 95%.	The Balancing Authority Area's value of CPS1 is less than 95% but greater than or equal to 90%.	The Balancing Authority Area's value of CPS1 is less than 90% but greater than or equal to 85%.	The Balancing Authority Area's value of CPS1 is less than 85%.	No changes.	
R2.	The Balancing Authority Area's value of CPS2 is less than 90% but greater than or equal to 85%.	The Balancing Authority Area's value of CPS2 is less than 85% but greater than or equal to 80%.	The Balancing Authority Area's value of CPS2 is less than 80% but greater than or equal to 75%.	The Balancing Authority Area's value of CPS2 is less than 75%.		
Revised R2.	The Balancing Authority Area's value of CPS2 is less than 90% but greater than or equal to 85%.	The Balancing Authority Area's value of CPS2 is less than 85% but greater than or equal to 80%.	The Balancing Authority Area's value of CPS2 is less than 80% but greater than or equal to 75%.	The Balancing Authority Area's value of CPS2 is less than 75%.	No changes.	
R3.	N/A	N/A	N/A	The Balancing Authority providing Overlap Regulation Service failed to use a combined ACE and frequency bias.		
Revised R3.	N/A	N/A	N/A	The Balancing Authority providing Overlap Regulation Service failed to use a combined ACE and frequency bias.	No changes.	

	Standard Number BAL-001-0 — Real Power Balancing Control Performance					
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change	
R4.	N/A	N/A	N/A	The Balancing Authority receiving Overlap Regulation Service failed to ensure that control performance was being evaluated in a manner consistent with the calculation methodology as described in BAL-001-01 R3.		
Revised R4.	N/A	N/A	N/A	The Balancing Authority receiving Overlap Regulation Service failed to ensure that control performance was being evaluated by the Balancing Authority providing Overlap Regulation Service in a manner consistent with the calculation methodology as described in BAL-001-01 R3.	Revised wording for clarity.	

	Standard Number BAL-002-0 — Disturbance Control Performance						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
Original R1.	N/A	N/A	N/A	The Balancing Authority does not have access to and/or operate Contingency Reserve to respond to Disturbances.			
Revised R1.	N/A	N/A	The Balancing Authority did not operate Contingency Reserve to respond to a Disturbance.	The Balancing Authority did not have access to Contingency Reserve to respond to a Disturbance.	Added High VSL, modified language of Severe VSL slightly.		
Original R1.1.	N/A	N/A	N/A	The Balancing Authority has elected to fulfill its Contingency Reserve obligations by participating as a member of a Reserve Sharing Group and the Reserve Sharing Group has not provided the same responsibilities and obligations as required of the responsible entity with respect to monitoring and meeting the requirements of Standard BAL-002.			
Revised R1.1.	N/A	N/A	N/A	The Balancing Authority has elected to fulfill its Contingency Reserve obligations by participating	No changes.  Language of the requirement sets up a potential conflict in that		

	Standard Number BAL-002-0 — Disturbance Control Performance						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
				as a member of a Reserve Sharing Group and the Reserve Sharing Group has not provided the same responsibilities and obligations as required of the responsible entity with respect to monitoring and meeting the requirements of Standard BAL-002.	members of an RSG are automatically assessed at a Severe VSL for violating a requirement of BAL-002, while those BAs that are not members of an RSG will be subject to the particular VSLs of each requirement. In other words, this requirement as written, seems to act as a disincentive to join an RSG.		
Original R2.	The Regional Reliability Organization, sub- Regional Reliability Organization, or Reserve Sharing Group has failed to specify 1 of the following sub- requirements.	The Regional Reliability Organization, sub-Regional Reliability Organization, or Reserve Sharing Group has failed to specify 2 or 3 of the following sub- requirements.	The Regional Reliability Organization, sub-Regional Reliability Organization, or Reserve Sharing Group has failed to specify 4 or 5 of the following sub- requirements.	The Regional Reliability Organization, sub-Regional Reliability Organization, or Reserve Sharing Group has failed to specify all 6 of the following sub- requirements.			
Revised R2.	The Regional Reliability Organization, sub- Regional Reliability Organization, or Reserve Sharing Group has failed to specify one sub- requirement in its	The Regional Reliability Organization, sub-Regional Reliability Organization, or Reserve Sharing Group has failed to specify two sub- requirements in its Contingency Reserve	The Regional Reliability Organization, sub-Regional Reliability Organization, or Reserve Sharing Group has failed to specify three sub- requirements in its Contingency Reserve	The Regional Reliability Organization, sub-Regional Reliability Organization, or Reserve Sharing Group has failed to specify four or more sub-requirements in its Contingency Reserve	Changed to indicate failure to meet 1 subrequirement as Low, 2 as Moderate, 3 as High and 4 or more as Severe. Incorporated sub-		

	Standard Number BAL-002-0 — Disturbance Control Performance						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
	Contingency Reserve policies.	policies.	policies.	policies.	requirements (components) into VSLs for the main requirement.		
Original R2.1.	The Regional Reliability Organization, sub- Regional Reliability Organization, or Reserve Sharing Group has failed to specify the minimum reserve requirement for the group.	N/A	N/A	N/A			
Revised R2.1.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.		
Original R2.2.	The Regional Reliability Organization, sub- Regional Reliability Organization, or Reserve Sharing Group has failed to specify the allocation of reserves among members.	N/A	N/A	N/A			
Revised R2.2.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		

	Standard Number BAL-002-0 — Disturbance Control Performance						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
Original R2.3.	The Regional Reliability Organization, sub- Regional Reliability Organization, or Reserve Sharing Group has failed to specify the permissible mix of Operating Reserve – Spinning and Operating Reserve – Supplemental that may be included in Contingency Reserve.	N/A	N/A	N/A			
Revised R2.3.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.		
Original R2.4.	The Regional Reliability Organization, sub- Regional Reliability Organization, or Reserve Sharing Group has failed to provide the procedure for applying Contingency Reserve in practice.	N/A	N/A	N/A			
Revised R2.4.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		

	Standard Number BAL-002-0 — Disturbance Control Performance					
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change	
Original R2.5.	The Regional Reliability Organization, sub- Regional Reliability Organization, or Reserve Sharing Group has failed to specify the limitations, if any, upon the amount of interruptible load that may be included.	N/A	N/A			
Revised R2.5.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.	
Original R2.6.	The Regional Reliability Organization, sub- Regional Reliability Organization, or Reserve Sharing Group has allowed the same portion of resource capacity (e.g., reserves from jointly owned generation) to be counted more than once as Contingency Reserve by multiple Balancing Authorities.	N/A	N/A	N/A		

	Standard Number BAL-002-0 — Disturbance Control Performance					
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change	
Revised R2.6.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.	
Original R3.	The Balancing Authority or Reserve Sharing Group's Average Percent Recovery per the NERC DCS quarterly report was less than 100% but greater than or equal to 95%.	The Balancing Authority or Reserve Sharing Group's Average Percent Recovery per the NERC DCS quarterly report was less than 95% but greater than or equal to 90%.	The Balancing Authority or Reserve Sharing Group's Average Percent Recovery per the NERC DCS quarterly report was less than 90% but greater than or equal to 85%.	The Balancing Authority or Reserve Sharing Group's Average Percent Recovery per the NERC DCS quarterly report was less than 85%.		
Revised R3.	The Balancing Authority or Reserve Sharing Group's average percent recovery per the NERC DCS quarterly report was less than 100% but greater than or equal to 95%.	The Balancing Authority or Reserve Sharing Group's average percent recovery per the NERC DCS quarterly report was less than 95% but greater than or equal to 90%.	The Balancing Authority or Reserve Sharing Group's average percent recovery per the NERC DCS quarterly report was less than 90% but greater than or equal to 85%.	The Balancing Authority or Reserve Sharing Group's average percent recovery per the NERC DCS quarterly report was less than 85%.	Incorporated sub-requirements (components) into VSLs for the main requirement.  Corrected capitalization.	
	The Balancing Authority or Reserve Sharing Group failed to review its probable contingencies to determine its prospective most severe single			The Balancing Authority or Reserve Sharing Group failed to carry at least enough Contingency Reserve to cover the most severe single contingency as specified in R3.1.		

	Standard Number BAL-002-0 — Disturbance Control Performance						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
	contingencies annually as specified in R3.1.						
Original R3.1.	The Balancing Authority or Reserve Sharing Group failed to review their probable contingencies to determine their prospective most severe single contingencies annually.	N/A	N/A	The Balancing Authority or Reserve Sharing Group failed to carry at least enough Contingency Reserve to cover the most severe single contingency.			
Revised R3.1.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		
Original R4.	The Balancing Authority or Reserve Sharing Group met the Disturbance Recovery Criterion within the Disturbance Recovery Period for more than 90% and less than 100% of Reportable Disturbances.	The Balancing Authority or Reserve Sharing Group met the Disturbance Recovery Criterion within the Disturbance Recovery Period for more than 80% and less than or equal to 90% of Reportable Disturbances.	The Balancing Authority or Reserve Sharing Group met the Disturbance Recovery Criterion within the Disturbance Recovery Period for more than 70% and less than or equal to 80% of Reportable Disturbances.	The Balancing Authority or Reserve Sharing Group met the Disturbance Recovery Criterion within the Disturbance Recovery Period for more than 0% and less than or equal to 70% of Reportable Disturbances.			
Revised R4.	The Balancing Authority or Reserve Sharing Group failed to meet the	The Balancing Authority or Reserve Sharing Group failed to meet the	The Balancing Authority or Reserve Sharing Group failed to meet the	The Balancing Authority or Reserve Sharing Group failed to meet the	Revised Severe wording for clarity.  Modified for consistency		

Standard Number BAL-002-0 — Disturbance Control Performance						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change	
	Disturbance Recovery Criterion within the Disturbance Recovery Period for 5% or less of Reportable Disturbances.	Disturbance Recovery Criterion within the Disturbance Recovery Period for more than 5% up to (and including) 10% of Reportable Disturbances.	Disturbance Recovery Criterion within the Disturbance Recovery Period for more than 10% up to (and including)15% of Reportable Disturbances.	Disturbance Recovery Criterion within the Disturbance Recovery Period for more than 15% of Reportable Disturbances.	between standards.	
Original R4.1.	The Balancing Authority failed to return its ACE to zero if its ACE just prior to the Reportable Disturbance was positive or equal to zero or for negative initial ACE values failed to return ACE to its pre-Disturbance value.	N/A	N/A	N/A		
Revised R4.1.	N/A	N/A	N/A	N/A	This subrequirement is explanatory text for the primary requirement R4 and the VSLs are part of the primary requirement.	
Original R4.2.	N/A	N/A	N/A	N/A		
Revised R4.2.	N/A	N/A	N/A	N/A	No changes. This is explanatory text for the primary requirement R4.	

	Standard Number BAL-002-0 — Disturbance Control Performance							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R5.	The Reserve Sharing Group met the DCS requirement for more than 90% and less than 100% of Reportable Disturbances.	The Reserve Sharing Group met the DCS requirements for more than 80% and less than or equal to 90% of Reportable Disturbances.	The Reserve Sharing Group met the DCS requirements for more than 70% and less than or equal to 80% of Reportable Disturbances.	The Reserve Sharing Group met the DCS requirements for more than 0% and less than or equal to 70% of Reportable Disturbances.				
Revised R5.	The Reserve Sharing Group failed to meet the DCS requirement for 5% or less of Reportable Disturbances.	The Reserve Sharing Group failed to meet the DCS requirements for more than 5% up to (and including) 10% of Reportable Disturbances.	The Reserve Sharing Group failed to meet the DCS requirements for more than 10% up to (and including) 15% of Reportable Disturbances.	The Reserve Sharing Group failed to meet the DCS requirements for more than 15% of Reportable Disturbances.	No changes. R5.1 and R5.2 are implicitly included in the calculation for determination of compliance to R5			
					Modified for consistency between standards.			
Original R5.1.	N/A	N/A	N/A	N/A				
Revised R5.1.	N/A	N/A	N/A	N/A	No changes.  The language of the subrequirement compliments the primary requirement therefore the VSLs are part of the main requirement - may be considered explanatory text.			

	Standard Number BAL-002-0 — Disturbance Control Performance							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R5.2.	N/A	N/A	N/A	N/A				
Revised R5.2.					No changes. The language of the subrequirement compliments the primary requirement therefore the VSLs are part of the main requirement - may be considered explanatory text.			
Original R6.	The Balancing Authority or Reserve Sharing Group restored less than 100% but greater than 90% of its contingency reserves during the Contingency Reserve Restoration Period.	The Balancing Authority or Reserve Sharing Group restored less than or equal to 90% but greater than 80% of its contingency reserves during the Contingency Reserve Restoration Period.	The Balancing Authority or Reserve Sharing Group restored less than or equal to 80% but greater than or equal to 70% of its Contingency Reserve during the Contingency Reserve Restoration Period.	The Balancing Authority or Reserve Sharing Group restored less than 70% of its Contingency Reserves during the Contingency Reserve Restoration Period.				
Revised R6.	The Balancing Authority or Reserve Sharing Group failed to restore 5% or less of its contingency reserves during the Contingency Reserve Restoration Period.	The Balancing Authority or Reserve Sharing Group failed to restore more than 5% up to (and including) 10% of its contingency reserves during the Contingency Reserve Restoration Period.	The Balancing Authority or Reserve Sharing Group failed to restore more than 10% up to (and including) 15% of its Contingency Reserve during the Contingency Reserve Restoration Period.	The Balancing Authority or Reserve Sharing Group failed to restore more than 15% of its Contingency Reserves during the Contingency Reserve Restoration Period.	No changes.  Modified for consistency between standards.			

	Standard Number BAL-002-0 — Disturbance Control Performance							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R6.1.	N/A	N/A	N/A	N/A				
Revised R6.1.	N/A	N/A	N/A	N/A	No changes.			
Original R6.2.	N/A	N/A	N/A	N/A				
Revised R6.2.	N/A	N/A	N/A	N/A	No changes.			

	Standard Number BAL-003-0 — Frequency Response and Bias							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R1.	N/A	N/A	The Balancing Authority reviewed its Frequency Bias Settings prior January 1, but failed to recalculate its setting to reflect any change in the Frequency Response of the Balancing Authority Area.	The Balancing Authority failed to review its Frequency Bias Settings prior to January 1, and failed to recalculate its setting to reflect any change in the Frequency Response of the Balancing Authority Area.				
Revised R1.	The Balancing Authority failed to report the method for determining its Frequency Bias Setting to the NERC Operating Committee.	The Balancing Authority failed to report its Frequency Bias Setting to the NERC Operating Committee.	The Balancing Authority failed to report its Frequency Bias Setting and the method for determining that Frequency Bias Setting to the NERC Operating Committee as required in R1.2	The Balancing Authority failed to review its Frequency Bias Settings by January 1 of each year and recalculate its setting to reflect any change in the Frequency Response of the Balancing Authority Area.	Added Lower and Moderate VSLs and revised the wording on High and Severe VSLs. Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R1.1.	N/A	N/A	N/A	The Balancing Authority changed its Frequency Bias Setting by changing the method used to determine the setting, without any of the factors used to determine the current bias value changing.				
Revised	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components)			

	Standard Number BAL-003-0 — Frequency Response and Bias							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
R1.1.					into VSLs for the main requirement.  No specific action required for R1.1 - its explanatory text to the main requirement.			
Original R1.2.	The Balancing Authority has not reported its method for calculating frequency bias setting.	The Balancing Authority has not reported its frequency bias setting.	The Balancing Authority has not reported its method for calculating frequency bias and has not reported its frequency bias setting.	The Balancing Authority has failed to report as directed by the requirement.				
Revised R1.2.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R2.	N/A	N/A	N/A	The Balancing Authority established and maintained a Frequency Bias Setting that was less than, the Balancing Authority's Frequency Response.				
Revised R2.	The Balancing Authority's determination of the fixed Frequency Bias value was not based on observations and			The Balancing Authority established and maintained a Frequency Bias Setting that was not as close as practical to, or greater than,	Added Lower, and incorporated sub-requirements (components) into VSLs for the main requirement.			

	Standard Number BAL-003-0 — Frequency Response and Bias						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
	averaging the Frequency Response from Disturbances during on- peak hours.			the Balancing Authority's Frequency Response.	Made minor clarifying edit.		
	OR						
	The Balancing Authority's variable frequency bias maintained was not based on an analysis of Frequency Response as it varied with factors such as load, generation, governor characteristics, and frequency.						
Original R2.1.	The Balancing Authority determination of the fixed Frequency Bias value was not based on observations and averaging the Frequency Response from Disturbances during onpeak hours.	N/A	N/A	N/A			
Revised R2.1.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components)		

	Standard Number BAL-003-0 — Frequency Response and Bias							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
					into VSLs for the main requirement.  The language in the subrequirement is related to the language in the primary requirement and completes the intent of the primary requirement.			
Original R2.2.	The Balancing Authorities variable frequency bias maintained was not based on an analyses of Frequency Response as it varied with factors such as load, generation, governor characteristics, and frequency.	N/A	N/A	N/A				
Revised R2.2.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
					The language in the subrequirement is related to the language in the primary requirement and completes the intent of the primary requirement.			

	Standard Number BAL-003-0 — Frequency Response and Bias							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R3.	N/A	N/A	N/A	The Balancing Authority did not operate its Automatic Generation Control (AGC) on Tie Line Frequency Bias, during periods when such operation would not have been adverse to system or Interconnection reliability.				
Revised R3.	N/A	N/A	N/A	The Balancing Authority did not operate its Automatic Generation Control (AGC) on Tie Line Frequency Bias, during periods when such operation would not have been adverse to system or Interconnection reliability.	No changes.			
Original R4.	The Balancing Authority that used Dynamic Scheduling or Pseudo-ties for jointly owned units did not reflect their respective share of the unit governor droop response in their respective Frequency Bias Setting.	N/A	N/A	N/A				

	Standard Number BAL-003-0 — Frequency Response and Bias						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
Revised R4.	N/A	N/A	N/A	The Balancing Authority that used Dynamic Scheduling or Pseudo-ties for jointly owned units did not reflect its respective share of the unit governor droop response in its respective Frequency Bias Setting.	Binary - Changed the Lower to Severe.		
Original R4.1.	The Balancing Authority (A) that contained the Jointly Owned Unit with fixed schedules did not incorporate the respective share of the unit governor droop response for any Balancing Authorities that have fixed schedules (B and C).	N/A	N/A	N/A			
Revised R4.1.	N/A	N/A	N/A	The Balancing Authority (A) that contained the Jointly Owned Unit with fixed schedules did not incorporate the respective share of the unit governor droop response for any Balancing Authorities that	Binary - Changed the Lower to Severe.		

	Standard Number BAL-003-0 — Frequency Response and Bias						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
				have fixed schedules (B and C).			
Original R4.2.	The Balancing Authorities that have a fixed schedule (B and C) but do not contain the Jointly Owned Unit, included their share of the governor droop response in their Frequency Bias Setting.	N/A	N/A	N/A			
Revised R4.2.	N/A	N/A	N/A	A Balancing Authority that has a fixed schedule (B and C) but does not contain the Jointly Owned Unit included its share of the governor droop response in its Frequency Bias Setting.	Binary - Changed the Lower to Severe. Fixed grammar.		
Original R5.	N/A	N/A	N/A	The Balancing Authority that served native load failed to have a monthly average Frequency Bias Setting that was at least 1% of the entities estimated yearly peak demand per 0.1 Hz change.			

	Standard Number BAL-003-0 — Frequency Response and Bias						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
Revised R5.	N/A	N/A	N/A	The Balancing Authority that served native load failed to have a monthly average Frequency Bias Setting that was at least 1% of the entities estimated yearly peak demand per 0.1 Hz change.	No changes.		
Original R5.1.	N/A	N/A	N/A	The Balancing Authority that does not serve native load did not have a monthly average Frequency Bias Setting that was at least 1% of its estimated maximum generation level in the coming year per 0.1 Hz change.			
Revised R5.1.	N/A	N/A	N/A	The Balancing Authority that does not serve native load did not have a monthly average Frequency Bias Setting that was at least 1% of its estimated maximum generation level in the coming year per 0.1 Hz change.	No changes.		

	Standard Number BAL-003-0 — Frequency Response and Bias							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R6.	N/A	The Balancing Authority that was performing Overlap Regulation Service changed its Frequency Bias Setting while performing Supplemental Regulation Service.	The Balancing Authority that was performing Overlap Regulation Service failed to increase its Frequency Bias Setting to match the frequency response of the entire area being controlled.					
Revised R6.	N/A	N/A	The Balancing Authority providing Overlap Regulation Service increased its Frequency Bias Setting but not enough to match the response of the entire area being controlled.	The Balancing Authority providing Overlap Regulation Service failed to increase its Frequency Bias Setting at all.  OR  The Balancing Authority providing Supplemental Regulation Service changed its Frequency Bias Setting.	Modified and moved VSLs to High and Severe			

	Standard Number EOP-001-0 — Emergency Operations Planning					
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments	
Original R1.	The Balancing Authority demonstrated the existence of operating agreements containing provisions for emergency assistance between the Balancing Authority itself and less then 100% but more than 75% of its adjacent Balancing Authorities.	The Balancing Authority demonstrated the existence of operating agreements containing provisions for emergency assistance between the Balancing Authority itself and less then or equal to 75% but more than 50% of its adjacent Balancing Authorities.	The Balancing Authority demonstrated the existence of operating agreements containing provisions for emergency assistance between the Balancing Authority itself and less then or equal to 50% but more than 25% of its adjacent Balancing Authorities.	The Balancing Authority demonstrated the existence of operating agreements containing provisions for emergency assistance between the Balancing Authority itself and for less than or equal to 25% of its adjacent Balancing Authorities.		
Revised R1	N/A	The Balancing Authority demonstrated the existence of an operating agreement(s) with at least one adjacent Balancing Authority for emergency assistance, but the agreement did not include provision for obtaining emergency assistance from any remote Balancing Authority.	N/A	The Balancing Authority did not demonstrate the existence of any operating agreements with adjacent Balancing Authorities that include provision for emergency assistance with adjacent Balancing Authorities.	Modified to reflect the interpretation that indicates the responsible entity must have an agreement with "at least one" adjacent Balancing Authority, but not with "all" adjacent Balancing Authorities.  Modified the Moderate to clarify that the Balancing Authority may have more than one agreement and added language to the Severe for improved clarity.	

	Standard Number EOP-001-0 — Emergency Operations Planning					
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments	
Original R2.	N/A	N/A	The Transmission Operator demonstrated the existence of an emergency load reduction plan for each identified IROL but at least one of the plans will take longer than 30 minutes to implement.	The Transmission Operator failed to demonstrate the existence of an emergency load reduction plan for all identified IROLs.		
Revised R2.	N/A	N/A	The Transmission Operator demonstrated the existence of an emergency load reduction plan for each identified IROL but at least one of the plans will take longer than 30 minutes to implement.	The Transmission Operator failed to demonstrate the existence of an emergency load reduction plan for all identified IROLs.	No changes made.	
Original R3.	The Transmission Operator or Balancing Authority failed to comply with one (1) of the sub-components.	The Transmission Operator or Balancing Authority failed to comply with two (2) of the sub-components.	The Transmission Operator or Balancing Authority has failed to comply with three (3) of the sub-components.	The Transmission Operator or Balancing Authority has failed to comply with four (4) of the sub-components.		
Revised R3.	N/A	N/A	N/A	N/A	The VSLs for the primary requirement were removed as there is no required performance in the primary requirement.	

	Standard Number EOP-001-0 — Emergency Operations Planning					
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments	
Original R3.1	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans to mitigate operating emergencies for insufficient generating capacity but the plans are missing one or more program/procedural elements.	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans to mitigate operating emergencies for insufficient generating capacity and the plans are implemented but the plans are not maintained.	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans to mitigate operating emergencies for insufficient generating capacity but the plans are not maintained nor implemented.	The Transmission Operator or Balancing Authority failed to demonstrate the existence of a set of plans to mitigate operating emergencies for insufficient generating capacity.		
Revised R3.1	N/A	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans to mitigate operating emergencies for insufficient generating capacity and the plans are implemented but the plans are not maintained.	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans to mitigate operating emergencies for insufficient generating capacity but the plans are neither maintained nor implemented.	The Transmission Operator or Balancing Authority failed to demonstrate the existence of a set of plans to mitigate operating emergencies for insufficient generating capacity.	Deleted generic Lower VSL.	
Original R3.2	The Transmission Operator or Balancing Authority demonstrated the existence of a set of	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans to mitigate operating emergencies on	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans to mitigate operating emergencies on	The Transmission Operator or Balancing Authority failed to demonstrate the existence of a set of plans to mitigate operating		

	Standard Number EOP-001-0 — Emergency Operations Planning						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments		
	plans to mitigate operating emergencies on the transmission system but the plans are missing one or more program/procedural elements.	the transmission system and the plans are implemented but the plans are not maintained.	the transmission system but the plans are not maintained nor implemented.	emergencies on the transmission system.			
Revised R3.2	N/A	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans to mitigate operating emergencies on the transmission system and the plans are implemented but the plans are not maintained.	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans to mitigate operating emergencies on the transmission system but the plans are neither maintained nor implemented.	The Transmission Operator or Balancing Authority failed to demonstrate the existence of a set of plans to mitigate operating emergencies on the transmission system.	Deleted generic Lower VSL.		
Original R3.3	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans for load shedding but the plans are missing one or more program/procedural elements.	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans for load shedding and the plans are implemented but the plans are not maintained.	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans for load shedding but the plans are not maintained nor implemented.	The Transmission Operator or Balancing Authority failed to demonstrate the existence of a set of plans for load shedding.			
Revised	N/A	The Transmission Operator	The Transmission Operator	The Transmission Operator	Deleted generic Lower		

	Standard Number EOP-001-0 — Emergency Operations Planning					
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments	
R3.3		or Balancing Authority demonstrated the existence of a set of plans for load shedding and the plans are implemented but the plans are not maintained.	or Balancing Authority demonstrated the existence of a set of plans for load shedding but the plans are neither maintained nor implemented.	or Balancing Authority failed to demonstrate the existence of a set of plans for load shedding.	VSL.	
Original R3.4	The Transmission Operator or Balancing Authority's system restoration plans are missing minor details or minor program/procedural elements.	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans for system restoration but the plans are missing one or more program/procedural elements.	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans for system restoration and the plans are implemented but the plans are not maintained.	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans for system restoration but the plans are not maintained nor implemented.		
Revised R3.4	N/A	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans for system restoration and the plans are implemented but the plans are not maintained.	The Transmission Operator or Balancing Authority demonstrated the existence of a set of plans for system restoration but the plans are neither maintained nor implemented.	The Transmission Operator or Balancing Authority failed to demonstrate the existence of a set of plans for system restoration.	Deleted generic Lower VSL and modified language in all remaining VSLs to match VSLs for R3.1, R3.2, and R3.3.	
Original R4.	N/A	The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans are missing two	The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans are missing three	The Transmission Operator or Balancing Authority failed to demonstrate the existence of emergency plans that will enable it to mitigate operating emergencies.		

	Standard Number EOP-001-0 — Emergency Operations Planning					
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments	
		(2) of the sub-requirements identified for R4.	(3) or four (4) of the sub- requirements identified for R4.			
Revised R4.	The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans do not include sub-requirement R4.4.	The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans do not include sub-requirement R4.3.	The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans do not include either sub-requirement R4.1 or R4.2.	The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans are missing two (2) or more of the subrequirements identified for R4.	Incorporated sub-requirements (components) into VSLs for the main requirement.	
Original R4.1	The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans are missing the communications	N/A	N/A	N/A		

	Standard Number EOP-001-0 — Emergency Operations Planning					
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments	
	protocols to be used during emergencies.					
Revised R4.1	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.	
Original R4.2	The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans are missing a list of controlling actions to resolve the emergency.	N/A	N/A	N/A		
Revised R4.2	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.	

	Standard Number EOP-001-0 — Emergency Operations Planning					
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments	
Original R4.3	The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating emergencies but the plans are missing a list the tasks to be coordinated with and among adjacent Transmission Operators and Balancing Authorities.	N/A	N/A	N/A		
Revised R4.3	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.	
Original R4.4	The Transmission Operator or Balancing Authority demonstrated the existence of emergency plans that will enable it to mitigate operating	N/A	N/A	N/A		

	Standard Number EOP-001-0 — Emergency Operations Planning					
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments	
	emergencies but the plans are missing the staffing levels for the emergency.					
Revised R4.4	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.	
Original R5.	The Transmission Operator or Balancing Authority included less then 100% but more then 90% of the applicable elements in Attachment 1-EOP- 001-0 in its emergency plan.	The Transmission Operator or Balancing Authority included less then or equal to 90% but more then 70% of the applicable elements in Attachment 1-EOP-001-0 in its emergency plan.	The Transmission Operator or Balancing Authority included less then or equal to 70% but more then 50% of the applicable elements in Attachment 1-EOP-001-0 in its emergency plan.	The Transmission Operator or Balancing Authority included less then or equal to 50% of the applicable elements in Attachment 1-EOP-001-0 in its emergency plan.		
Revised R5.	The Transmission Operator or Balancing Authority included less then 100% but more then 90% of the applicable elements in Attachment 1-EOP- 001-0 in its emergency plan.	The Transmission Operator or Balancing Authority included less then or equal to 90% but more then 70% of the applicable elements in Attachment 1-EOP-001-0 in its emergency plan.	The Transmission Operator or Balancing Authority included less then or equal to 70% but more then 50% of the applicable elements in Attachment 1-EOP-001-0 in its emergency plan.	The Transmission Operator or Balancing Authority included less then or equal to 50% of the applicable elements in Attachment 1-EOP-001-0 in its emergency plan.	No changes.	

	Standard Number EOP-001-0 — Emergency Operations Planning					
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments	
Original R6	N/A	N/A	N/A	The Transmission Operator or Balancing Authority failed to provide evidence that it reviewed, and updated as appropriate, each of its emergency plans at least once in the past thirteen calendar months.  OR  The Transmission Operator or Balancing Authority failed to provide a copy of an updated emergency plan to its Reliability Coordinator, all its neighboring Transmission Operators, and all its neighboring Balancing Authorities.		
Revised R6.	N/A	N/A	N/A	The Transmission Operator or Balancing Authority failed to provide evidence that it completed an annual review, and updated each of its emergency plans appropriately.	Added a reference to the "annual update" in the Severe VSL. Changed "as appropriate" to "appropriately."	

	Standard Number EOP-001-0 — Emergency Operations Planning								
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments				
				OR  The Transmission Operator or Balancing Authority failed to provide a copy of one of its updated emergency plans to its Reliability Coordinator, all its neighboring Transmission Operators, and all its neighboring Balancing Authorities.					
Original R7.	N/A	The Transmission Operator or Balancing Authority demonstrated that it coordinated its emergency plans with other Transmission Operators and Balancing Authorities as appropriate but the but the coordination did not include two (2) of the appropriate subrequirements identified for R7.	The Transmission Operator or Balancing Authority demonstrated that it coordinated its emergency plans with other Transmission Operators and Balancing Authorities as appropriate but the but the coordination did not include three (3) or four (4) of the appropriate subrequirements identified for R7.	The Transmission Operator or Balancing Authority failed to demonstrate that it coordinated its emergency plans with other Transmission Operators and Balancing Authorities as appropriate.					

	Standard Number EOP-001-0 — Emergency Operations Planning							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments			
Revised R7	The Transmission Operator or Balancing Authority demonstrated that it coordinated its emergency plans with other Transmission Operators and Balancing Authorities as appropriate but the coordination specified in R7.4 was applicable and was not included.	The Transmission Operator or Balancing Authority demonstrated that it coordinated its emergency plans with other Transmission Operators and Balancing Authorities as appropriate but the coordination specified in R7.3 was applicable and was not included.	The Transmission Operator or Balancing Authority demonstrated that it coordinated its emergency plans with other Transmission Operators and Balancing Authorities as appropriate but the coordination specified in either R7.1 or R7.2 was applicable and was not included.	The Transmission Operator or Balancing Authority demonstrated that it coordinated its emergency plans with other Transmission Operators and Balancing Authorities as appropriate but the coordination specified in two (2) or more of the subrequirements was applicable and was not included.	Incorporated sub-requirements (components) into VSLs for the main requirement.  Modified language to identify specific subrequirements associated with Lower, Moderate and High VSLs.  Changed, "appropriate" to "applicable" to use the same language as the requirement.			
Original R7.1	The Transmission Operator or Balancing Authority did not establish and maintain reliable communications between interconnected systems as appropriate for the purpose of coordinating emergency plans.	N/A	N/A	N/A				

	Standard Number EOP-001-0 — Emergency Operations Planning							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments			
Revised R7.1	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R7.2	The Transmission Operator or Balancing Authority did not arrange for new interchange agreements as appropriate for the purpose of coordinating emergency plans.	N/A	N/A	N/A				
Revised R7.2	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R7.3	The Transmission Operator or Balancing Authority did not coordinate transmission and generator maintenance schedules as appropriate for the purpose of coordinating	N/A	N/A	N/A				

	Standard Number EOP-001-0 — Emergency Operations Planning							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Comments			
	emergency plans.							
Revised R7.3	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R7.4	The Transmission Operator or Balancing Authority did not arrange deliveries of electrical energy or fuel fro, remote systems as appropriate for the purpose of coordinating emergency plans.	N/A	N/A	N/A				
Revised R7.4	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			

	Standard Number TOP-004-2 — Transmission Operations							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R1.	N/A	N/A	The Transmission Operator operated within the Interconnection Reliability Operating Limits (IROLs), but failed to operate within the System Operating Limits (SOLs).	The Transmission Operator failed to operate within the Interconnection Reliability Operating Limits (IROLs) and System Operating Limits (SOLs).				
Revised R1.	N/A	N/A	N/A	The Transmission Operator failed to operate within the Interconnection Reliability Operating Limits (IROLs) and System Operating Limits (SOLs).	Revised to make Binary.			
Original R2.	N/A	N/A	N/A	The Transmission Operator failed to operate so that instability, uncontrolled separation, or cascading outages would not occur as a result of the most severe single contingency.				
Revised R2.	N/A	N/A	N/A	The Transmission Operator failed to operate so that instability, uncontrolled separation, or cascading outages would not occur as a result of the most severe single contingency.	No changes.			

	Standard Number TOP-004-2 — Transmission Operations							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R3.	N/A	N/A	N/A	The Transmission Operator failed to operate (when practical) to protect against instability, uncontrolled separation, or cascading outages resulting from multiple outages, as specified by Regional Reliability Organization policy.				
Revised R3.	N/A	N/A	N/A	The Transmission Operator failed to operate to protect against instability, uncontrolled separation, or cascading outages resulting from multiple outages, as specified by Reliability Coordinator policy.	Removed (when practical), Changed reference from RRO to RC.			
Original R4.	The Transmission Operator entering an unknown operating state (i.e., any state for which valid operating limits have not been determined), failed to restore operations to respect proven reliable power system limits for	The Transmission Operator entering an unknown operating state (i.e., any state for which valid operating limits have not been determined), failed to restore operations to respect proven reliable power system limits for	The Transmission Operator entering an unknown operating state (i.e., any state for which valid operating limits have not been determined), failed to restore operations to respect proven reliable power system limits for	The Transmission Operator entering an unknown operating state (i.e., any state for which valid operating limits have not been determined), failed to restore operations to respect proven reliable power system limits for				

	Standard Number TOP-004-2 — Transmission Operations							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
	more than 30 minutes but less than or equal to 35 minutes.	more than 35 minutes but less than or equal to 40 minutes.	more than 40 minutes but less than or equal to 45 minutes.	more than 45 minutes.				
Revised R4.	N/A	N/A	N/A	The Transmission Operator entered an unknown operating state (i.e., any state for which valid operating limits have not been determined), and failed to restore operations to respect proven reliable power system limits for more than 30 minutes.	Changed to make the VSL Binary.			
Original R5.	N/A	N/A	N/A	The Transmission Operator does not have evidence that the actions taken to protect its area, resulting in its disconnection from the Interconnection, were necessary to prevent the danger of violating an IROL or SOL.				
Revised R5.	N/A	N/A	N/A	The Transmission Operator did not make every effort to remain connected to the Interconnection except when the Transmission	Modified VSL language to align with the language of the requirement.			

	Standard Number TOP-004-2 — Transmission Operations								
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change				
				Operator determined that by remaining interconnected, it was in imminent danger of violating an IROL or SOL.					
Original R6.	The Transmission Operator developed, maintained, and implemented formal policies and procedures to provide for transmission reliability, addressing the execution and coordination of activities that impact inter- and intra-Regional reliability, including the elements listed in TOP-004-1 R6.1 through R6.4, but failed to include other Transmission Operators in the development of said policies and procedures.	The Transmission Operator, individually and jointly with other Transmission Operators, developed, maintained, and implemented formal policies and procedures to provide for transmission reliability, addressing the execution and coordination of activities that impact inter- and intra-Regional reliability, but failed to include one of the elements listed in TOP-004-1 R6.1 through R6.4.	The Transmission Operator, individually and jointly with other Transmission Operators, developed, maintained, and implemented formal policies and procedures to provide for transmission reliability, addressing the execution and coordination of activities that impact inter- and intra-Regional reliability, but failed to include two of the elements listed in TOP-004-1 R6.1 through R6.4.	The Transmission Operator, individually and jointly with other Transmission Operators, developed, maintained, and implemented formal policies and procedures to provide for transmission reliability, addressing the execution and coordination of activities that impact inter- and intra-Regional reliability, but failed to include three or more of the elements listed in TOP-004-1 R6.1 through R6.4.					
Revised R6.	The Transmission Operator, individually and jointly with other Transmission Operators, developed, maintained,	The Transmission Operator, individually and jointly with other Transmission Operators, developed, maintained, and	The Transmission Operator, individually and jointly with other Transmission Operators, developed, maintained, and	The Transmission Operator, failed to develop, maintain, and implemented formal policies and procedures to provide for	Reworded language of the VSLs and incorporated sub-requirements (components) into VSLs for the main				

	Standard Number TOP-004-2 — Transmission Operations								
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change				
	and implemented formal policies and procedures to provide for transmission reliability, addressing the execution and coordination of activities that impact inter- and intra-Regional reliability, but failed to include information required by 1 of the sub-requirements R6.1 thru R6.6.	implemented formal policies and procedures to provide for transmission reliability, addressing the execution and coordination of activities that impact inter- and intra-Regional reliability, but failed to include information required by 2 of the sub-requirements R6.1 thru R6.6.	implemented formal policies and procedures to provide for transmission reliability, addressing the execution and coordination of activities that impact inter- and intra-Regional reliability, but failed to include information required by 3 of the sub-requirements R6.1 thru R6.6.	transmission reliability, addressing the execution and coordination of activities that impact interand intra-Regional reliability. If formal policies and procedures were developed, such policies and procedures failed to include any of the information required in 4 or more of the subrequirements R6.1 thru R6.6	requirement.				
Original R6.1.	The Transmission Operator failed to include monitoring and controlling voltage levels and real and reactive power flows in the development, maintenance, and implementation of formal policies and procedures to provide for transmission reliability as described	N/A	N/A	N/A					

	Standard Number TOP-004-2 — Transmission Operations							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Revised R6.2.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R6.2.	The Transmission Operator failed to include switching transmission elements in the development, maintenance, and implementation of formal policies and procedures to provide for transmission reliability as described in TOP-004-1 R6.	N/A	N/A	N/A				
Revised R6.2.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R6.3.	The Transmission Operator failed to include planned outages of transmission elements in the development, maintenance, and implementation of formal policies and procedures to	N/A	N/A	N/A				

	Standard Number TOP-004-2 — Transmission Operations							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
	provide for transmission reliability as described in TOP-004-1 R6.							
Revised R6.3.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R6.4.	The Transmission Operator failed to include responding to IROL and SOL violations in the development, maintenance, and implementation of formal policies and procedures to provide for transmission reliability as described in TOP-004-1 R6.	N/A	N/A	N/A				
Revised R6.4.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			

	Standard Number TPL-001-0 — System Performance Under Normal Conditions							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R1.	The responsible entity is non-compliant with 25% or less of the subcomponents.	The responsible entity is non-compliant with more than 25% but less than 50% of the sub-components.	The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.	The responsible entity is non-compliant with 75% or more of the subcomponents.				
Revised R1.	The responsible entity has failed to demonstrate a valid assessment for the long-term period, but a valid assessment for the near-term period exists. (R 1.2)  OR  The responsible entity is non-compliant with one of the sub-components of requirement R1.3 (R1.3.1 through R1.3.9)	The responsible entity has failed to demonstrate a valid assessment for the near-term period, but a valid assessment for the long-term period exists. (R1.2)  OR  The responsible entity is non-compliant with two of the sub-components of requirement R1.3 (R1.3.1 through 1.3.9)	The responsible entity is non-compliant with three of the sub-components of requirement R1.3 (R1.3.1 through 1.3.9).	The responsible entity did not perform the transmission assessments annually. (R1.1)  OR  The responsible entity has failed to demonstrate a valid assessment for the near-term period and long-term planning period. (R1.2)  OR  The responsible entity is non-compliant with four or more of the sub-components of requirement R1.3 (R1.3.1 through 1.3.9).	Incorporated sub-requirements (components) into VSLs for the main requirement.			

	Standard Number TPL-001-0 — System Performance Under Normal Conditions							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
				OR  The responsible entity has failed to demonstrate that a corrective action plan exists in order to satisfy Category				
Original R1.1.	N/A	N/A	N/A	A planning requirements. (R1.4)  The assessments were not made on an annual basis.				
Revised R1.1	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R1.2.	The responsible entity has failed to demonstrate a valid assessment for the long-term period, but a valid assessment for the near-term period exists.	The responsible entity has failed to demonstrate a valid assessment for the near-term period, but a valid assessment for the long-term period exists.	N/A	The responsible entity has failed to demonstrate a valid assessment for the near-term period AND long-term planning period.				
Revised R1.2	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			

	Standard Number TPL-001-0 — System Performance Under Normal Conditions							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R1.3.	The responsible entity is non-compliant with 25% or less of the subcomponents.	The responsible entity is non-compliant with more than 25% but less than 50% of the sub-components.	The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.	The responsible entity is non-compliant with 75% or more of the subcomponents.				
Revised R1.3	N/A	N/A	N/A	N/A	Removed "multi-component" within the subequirement. Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R1.3.1.	N/A	N/A	N/A	The responsible entity has failed to cover critical system conditions and study years as deemed appropriate.				
Revised R1.3.1	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R1.3.2.	The responsible entity's most recent long-term studies (and/or system simulation testing) were not performed in the most recent annual period AND	The responsible entity's most recent near-term studies (and/or system simulation testing) were not performed in the most recent annual period AND	N/A	The responsible entity's most recent near-term studies (and/or system testing) AND most recent long-term studies (and/or system simulation testing)				

	Standard Number TPL-001-0 — System Performance Under Normal Conditions							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
	significant system changes (actual or proposed) indicate that past studies (and/or system testing) are no longer valid.	significant system changes (actual or proposed) indicate that past studies (and/or system testing) are no longer valid.		were not performed in the most recent annual period AND significant system changes (actual or proposed) indicate that past studies (and/or system testing) are no longer valid.				
Revised R1.3.2.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R1.3.3.	N/A	N/A	N/A	The responsible entity failed to produce evidence of a past or current year long-term study and/or system simulation testing (beyond 5-year planning horizon) when past or current year near-term studies and/or system simulation testing show marginal conditions that may require longer lead-time solutions.				
Revised R1.3.3.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main			

	Standard Number TPL-001-0 — System Performance Under Normal Conditions						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
					requirement.		
Original R1.3.4.	N/A	N/A	N/A	No pre-contingency operating procedures are in place for existing facilities.			
Revised R1.3.4.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		
Original R1.3.5.	The system model(s) used for current or past analysis did not properly represent up to (but less than) 25% of the firm transfers to/from the responsible entity's service territory.	The system model(s) used for current or past analysis did not properly represent 25% or more but less than 50% of the firm transfers to/from the responsible entity's service territory.	The system model(s) used for current or past analysis did not properly represent 50% or more but less than 75% of the firm transfers to/from the responsible entity's service territory.	The system model(s) used for current or past analysis did not properly represent 75% or more of the firm transfers to/from the responsible entity's service territory.			
Revised R1.3.5.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		
Original R1.3.6.	N/A	N/A	N/A	The responsible entity has failed to produce evidence of a valid current or past study and/or system simulation testing reflecting analysis over a range of			

	Standard Number TPL-001-0 — System Performance Under Normal Conditions							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
				forecast system demands.				
Revised R1.3.6.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R1.3.7.	N/A	N/A	N/A	No past or current study results exists showing precontingency system analysis.				
Revised R1.3.7.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R1.3.8.	The responsible entity's transmission model used for past or current studies and/or system simulation testing properly reflects existing facilities, but is deficient in reflecting planned facilities.	The responsible entity's transmission model used for past or current studies and/or system simulation testing properly reflects planned facilities, but is deficient in reflecting existing facilities.	N/A	The responsible entity's transmission model used for past or current studies and/or system simulation testing is deficient in reflecting existing AND planned facilities.				
Revised R1.3.8.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main			

	Standard Number TPL-001-0 — System Performance Under Normal Conditions							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
					requirement.			
Original R1.3.9.	N/A	N/A	N/A	The responsible entity has failed to ensure in a past or current study and/or system simulation testing that sufficient reactive power resources are available to meet required system performance.				
Revised R1.3.9.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R1.4.	N/A	N/A	N/A	The responsible entity has failed to demonstrate that a corrective action plan exists in order to satisfy Category A planning requirements.				
Revised R1.4.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R2.	The responsible entity is non-compliant with 25% or less of the sub-	The responsible entity is non-compliant with more than 25% but less than 50%	The responsible entity is non-compliant with 50% or more but less than 75% of	The responsible entity is non-compliant with 75% or more of the sub-				

	Standard Number TPL-001-0 — System Performance Under Normal Conditions							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
	components.	of the sub-components.	the sub-components.	components.				
Revised R2.	N/A	The responsible entity has failed to review the continuing need for previously identified facility additions through subsequent annual assessments. (R2.2)	The responsible entity provided documented evidence of corrective action plans in order to satisfy Category A planning requirements, but failed to include an implementation schedule with in-service dates (R2.1.1 and R2.1.2)  OR  The responsible entity failed to consider necessary lead times to implement its corrective action plan. (R2.1.3)	The responsible entity has failed to provide documented evidence of corrective action plans in order to satisfy Category A planning requirements. (R2.1)	Incorporated sub-requirements (components) into VSLs for the main requirement  Replaced, "demonstrate" with "review" in moderate VSL.			
Original R2.1.	N/A	N/A	N/A	The responsible entity has failed to provide documented evidence of corrective action plans in order to satisfy Category A planning requirements.				

	Standard Number TPL-001-0 — System Performance Under Normal Conditions							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Revised R2.1.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R2.1.1.	N/A	N/A	N/A	A schedule for the responsible entity's corrective action plan does not exist.				
Revised R2.1.1.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R2.1.2.	N/A	N/A	N/A	Anticipated in-service dates, for the responsible entity's corrective action plan do not exist.				
Revised R2.1.2.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R2.1.3.	N/A	N/A	The responsible entity failed to consider necessary lead times to implement its corrective action plan.	N/A				

	Standard Number TPL-001-0 — System Performance Under Normal Conditions							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Revised R2.1.3.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R2.2.	N/A	The responsible entity has failed to demonstrate the continuing need for previously identified facility additions through subsequent annual assessments.	N/A	N/A				
Revised R2.2.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R3.	N/A	The responsible entity documented the results of its reliability assessments and corrective plans but did not annually provided them to its respective NERC Regional Reliability Organization(s) as required by the Regional Reliability Organization	N/A	The responsible entity DID NOT document the results of its annual reliability assessments and corrective plans AND did not annually provided them to its respective NERC Regional Reliability Organization(s) as required by the Regional Reliability Organization				

	Standard Number TPL-001-0 — System Performance Under Normal Conditions									
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change					
Revised R3.	N/A	The responsible entity documented the results of its reliability assessments and corrective plans but did not annually provide them to its respective NERC Regional Reliability Organization(s) as required by the Regional Reliability Organization	N/A	The responsible entity DID NOT document the results of its annual reliability assessments and corrective plans AND did not annually provide them to its respective NERC Regional Reliability Organization(s) as required by the Regional Reliability Organization	No changes. Corrected grammar.					

	Standard Number TPL-002-0 — System Performance Following Loss of a Single Bulk Electric System Element							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R1.	The responsible entity is non-compliant with 25% or less of the subcomponents.	The responsible entity is non-compliant with more than 25% but less than 50% of the sub-components.	The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.	The responsible entity is non-compliant with 75% or more of the subcomponents.				
Revised R1.	The responsible entity has failed to demonstrate a valid assessment for the long-term period, but a valid assessment for the near-term period exists. (R 1.2)  OR  The responsible entity is non-compliant with one of the sub-components of requirement R1.3 (R1.3.1 through R1.3.12).  OR  The responsible entity has considered the NERC Category B contingencies applicable to their system,	The responsible entity has failed to demonstrate a valid assessment for the near-term period, but a valid assessment for the long-term period exists. (R1.2)  OR  The responsible entity is non-compliant with two of the sub-components of requirement R1.3 (R1.3.1 through 1.3.12).  OR  The responsible entity has considered the NERC Category B contingencies applicable to their system,	The responsible entity is non-compliant with three of the sub-components of requirement R1.3 (R1.3.1 through 1.3.12).  OR  The responsible entity has considered the NERC Category B contingencies applicable to their system, but was deficient with respect to more than 10% up to (and including) 15% of all applicable contingencies. (R1.5)	The responsible entity did not perform the transmission assessments annually. (R1.1)  OR  The responsible entity has failed to demonstrate a valid assessment for the near-term period and long-term planning period. (R1.2)  OR  The responsible entity is non-compliant with four or more of the subcomponents of requirement R1.3 (R1.3.1 through 1.3.12).	Incorporated subrequirements (components) into VSLs for the main requirement.  Revised percentiles in R1 to 5%, 10%, 15%.  Modified % language for consistency between standards.			

R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change
	but was deficient with respect to 5% or less of all applicable contingencies. (R1.5)	but was deficient with respect to more than 5% up to (and including) 10% of all applicable contingencies. (R1.5)		OR  The responsible entity has failed to demonstrate that a corrective action plan exists in order to satisfy Category B planning requirements. (R1.4)  OR  The responsible entity has considered the NERC Category B contingencies applicable to their system, but was deficient with respect to more than 15% of all applicable contingencies. (R1.5)	
Original R1.1.	N/A	N/A	N/A	The assessments were not made on an annual basis.	
Revised R1.1.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.

•	Standard Number TPL-002-0 — System Performance Following Loss of a Single Bulk Electric System Element						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
Original R1.2.	The responsible entity has failed to demonstrate a valid assessment for the long-term period, but a valid assessment for the near-term period exists.	The responsible entity has failed to demonstrate a valid assessment for the near-term period, but a valid assessment for the long-term period exists.	N/A	The responsible entity has failed to demonstrate a valid assessment for the near-term period AND long-term planning period.			
Revised R1.2.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		
Original R1.3.	The responsible entity is non-compliant with 25% or less of the subcomponents.	The responsible entity is non-compliant with more than 25% but less than 50% of the sub-components.	The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.	The responsible entity is non-compliant with 75% or more of the subcomponents.			
Revised R1.3.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		
Original R1.3.1.	N/A	The responsible entity provided evidence through current or past studies and/or system simulation testing that selected NERC Category B contingencies were evaluated, however, no rational was provided to	N/A	The responsible entity did not provided evidence through current or past studies and/or system simulation testing to indicate that any NERC Category B contingencies were evaluated.			

_				s of a Single Bulk Electric \$	
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change
		indicate why the remaining Category B contingencies for their system were not evaluated.			
Revised R1.3.1.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.
Original R1.3.2.	N/A	N/A	N/A	The responsible entity has failed to cover critical system conditions and study years as deemed appropriate.	
Revised R1.3.2.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.
Original R1.3.3.	The responsible entity's most recent long-term studies (and/or system simulation testing) were not performed in the most recent annual period AND significant system changes (actual or proposed) indicate that past studies (and/or	The responsible entity's most recent near-term studies (and/or system simulation testing) were not performed in the most recent annual period AND significant system changes (actual or proposed) indicate that past studies (and/or system testing) are	N/A	The responsible entity's most recent near-term studies (and/or system simulation testing) AND most recent long-term studies (and/or system testing) were not performed in the most recent annual period AND significant system changes (actual or	

;	Standard Number TPL-002-0 — System Performance Following Loss of a Single Bulk Electric System Element						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
	system testing) are no longer valid.	no longer valid.		proposed) indicate that past studies (and/or system simulation testing) are no longer valid.			
Revised R1.3.3.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.		
Original R1.3.4.	N/A	N/A	N/A	The responsible entity failed to produce evidence of a past or current year long-term study and/or system simulation testing (beyond 5-year planning horizon) when past or current year near-term studies and/or system simulation testing show marginal conditions that may require longer lead-time solutions.			
Revised R1.3.4.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.		

;	Standard Number TPL-0	002-0 — System Perforn	nance Following Loss o	f a Single Bulk Electric \$	System Element
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change
Original R1.3.5.	The system model(s) used for current or past analysis did not properly represent up to (but less than) 25% of the firm transfers to/from the responsible entity's service territory.	The system model(s) used for current or past analysis did not properly represent 25% or more but less than 50% of the firm transfers to/from the responsible entity's service territory.	The system model(s) used for current or past analysis did not properly represent 50% or more but less than 75% of the firm transfers to/from the responsible entity's service territory.	The system model(s) used for current or past analysis did not properly represent 75% or more of the firm transfers to/from the responsible entity's service territory.	
Revised R1.3.5.	N/A	N/A	N/A	N/A	Revised to include as multi-component. Incorporated sub-requirements (components) into VSLs for the main requirement.
Original R1.3.6.	N/A	N/A	N/A	The responsible entity has failed to produce evidence of a valid current or past study and/or system simulation testing reflecting analysis over a range of forecast system demands.	
Revised R1.3.6.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.
Original R1.3.7.	N/A	N/A	N/A	No past or current study results exists showing	

R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change
				Category B contingency system analysis.	
Revised R1.3.7.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.
Original R1.3.8.	The responsible entity's transmission model used for past or current studies and/or system simulation testing properly reflects existing facilities, but is deficient in reflecting planned facilities.	The responsible entity's transmission model used for past or current studies and/or system simulation testing properly reflects planned facilities, but is deficient in reflecting existing facilities.	N/A	The responsible entity's transmission model used for past or current studies and/or system simulation testing is deficient in reflecting existing AND planned facilities.	
Revised R1.3.8.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.
Original R1.3.9.	N/A	N/A	N/A	The responsible entity has failed to ensure in a past or current study and/or system simulation testing that sufficient reactive power resources are available to meet required system performance.	

;	Standard Number TPL-002-0 — System Performance Following Loss of a Single Bulk Electric System Element						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
Revised R1.3.9.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		
Original R1.3.10.	N/A	N/A	The responsible entity's transmission model used for past or current studies is deficient with respect to the effects of planned protection systems, including any backup or redundant systems.	The responsible entity's transmission model used for past or current studies is deficient with respect to the effects of existing protection systems, including any backup or redundant systems.			
Revised R1.3.10.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		
Original R1.3.11.	N/A	N/A	The responsible entity's transmission model used for past or current studies is deficient with respect to the effects of planned control devices.	The responsible entity's transmission model used for past or current studies is deficient with respect to the effects of existing control devices.			
Revised R1.3.11.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		

•	Standard Number TPL-002-0 — System Performance Following Loss of a Single Bulk Electric System Element							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R1.3.12.	N/A	N/A	N/A	The responsible entity's transmission model used for past or current studies is deficient with respect to the inclusion of planned maintenance outages of bulk electric transmission facilities.				
Revised R1.3.12.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R1.4.	N/A	N/A	N/A	The responsible entity has failed to demonstrate that a corrective action plan exists in order to satisfy Category B planning requirements.				
Revised R1.4.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R1.5.	The responsible entity has considered the NERC Category B contingencies applicable to their system, but was deficient with	The responsible entity has considered the NERC Category B contingencies applicable to their system, but was deficient with	The responsible entity has considered the NERC Category B contingencies applicable to their system, but was deficient with	The responsible entity has considered the NERC Category B contingencies applicable to their system, but was deficient 75% or				

Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change
respect to 25% or less of all applicable contingencies.	respect to more than 25% but less than 50% of all applicable contingencies.	respect to more than 50% but less than 75% of all applicable contingencies.	more of all applicable contingencies.	
N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.
The responsible entity is non-compliant with 25% or less of the subcomponents.	The responsible entity is non-compliant with more than 25% but less than 50% of the sub-components.	The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.	The responsible entity is non-compliant with 75% or more of the subcomponents.	
N/A	The responsible entity has failed to review the continuing need for previously identified facility additions through subsequent annual assessments. (R2.2)	The responsible entity provided documented evidence of corrective action plans in order to satisfy Category B planning requirements, but failed to include a implementation schedule with in-service dates (R2.1.1 and R2.1.2)	The responsible entity has failed to provide documented evidence of corrective action plans in order to satisfy Category B planning requirements. (R2.1)	Revised, removed prior multi-component approach and incorporated sub-requirements (components) into VSLs for the main requirement.  Replaced, "demonstrate" with "review" in moderate VSL
		OR  The responsible entity		
	respect to 25% or less of all applicable contingencies.  N/A  The responsible entity is non-compliant with 25% or less of the subcomponents.	respect to 25% or less of all applicable contingencies.  N/A  The responsible entity is non-compliant with 25% or less of the subcomponents.  N/A  The responsible entity is non-compliant with 25% of the subcomponents.  The responsible entity is non-compliant with more than 25% but less than 50% of the sub-components.  The responsible entity has failed to review the continuing need for previously identified facility additions through subsequent annual	respect to 25% or less of all applicable contingencies.  N/A  The responsible entity is non-compliant with 25% or less of the sub-components.  N/A  The responsible entity is non-compliant with 25% of the sub-components.  N/A  The responsible entity is non-compliant with 50% or less of the sub-components.  The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.  The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.  The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.  The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.  The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.  The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.  The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.  The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.  OR	respect to 25% or less of all applicable contingencies.  N/A  The responsible entity is non-compliant with 25% or less of the sub-components.  N/A  The responsible entity is non-compliant with more of than 25% but less than 50% of the sub-components.  N/A  The responsible entity is non-compliant with more of than 25% but less than 50% of the sub-components.  The responsible entity is non-compliant with 50% or more of the sub-components.  The responsible entity has failed to review the continuing need for previously identified facility additions through subsequent annual assessments. (R2.2)  The responsible entity provided documented evidence of corrective action plans in order to satisfy Category B planning requirements. (R2.1)  OR

	Standard Number TPL-002-0 — System Performance Following Loss of a Single Bulk Electric System Element							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
			lead times to implement its corrective action plan. (R2.1.3)					
Original R2.1.	N/A	N/A	N/A	The responsible entity has failed to provide documented evidence of corrective action plans in order to satisfy Category B planning requirements.				
Revised R2.1.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R2.1.1.	N/A	N/A	N/A	A schedule for the responsible entity's corrective action plan does not exist.				
Revised R2.1.1.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R2.1.2.	N/A	N/A	N/A	Anticipated in-service dates, for the responsible entity's corrective action plan does not exist. This would reflect effective				

;	Standard Number TPL-002-0 — System Performance Following Loss of a Single Bulk Electric System Element						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
				dates for pre-contingency operating procedures or in- service dates for proposed system changes.			
Revised R2.1.2.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.		
Original R2.1.3.	N/A	The responsible entity failed to consider necessary lead times to implement its corrective action plan.	N/A	N/A			
Revised R2.1.3.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		
Original R2.2.	N/A	The responsible entity has failed to demonstrate the continuing need for previously identified facility additions through sub-sequent annual assessments.	N/A	N/A			
Revised R2.2.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main		

	Standard Number TPL-002-0 — System Performance Following Loss of a Single Bulk Electric System Element						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
					requirement.		
Original R3.	N/A	The responsible entity documented the results of its reliability assessments and corrective plans but did not annually provided them to its respective NERC Regional Reliability Organization(s) as required by the Regional Reliability Organization	N/A	The responsible entity DID NOT document the results of its annual reliability assessments and corrective plans AND did not annually provided them to its respective NERC Regional Reliability Organization(s) as required by the Regional Reliability Organization			
Revised R3.	N/A	The responsible entity documented the results of its reliability assessments and corrective plans but did not annually provide them to its respective NERC Regional Reliability Organization(s) as required by the Regional Reliability Organization.	N/A	The responsible entity DID NOT document the results of its annual reliability assessments and corrective plans AND did not annually provide them to its respective NERC Regional Reliability Organization(s) as required by the Regional Reliability Organization.	No changes made. Corrected grammar.		

	Standard Number TPL-003-0 — System Performance Following Loss of Two or More BES Elements						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
Original R1.	The responsible entity is non-compliant with 25% or less of the subcomponents.	The responsible entity is non-compliant with more than 25% but less than 50% of the sub-components.	The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.	The responsible entity is non-compliant with 75% or more of the subcomponents.			
Revised R1.	The responsible entity has failed to demonstrate a valid assessment for the long-term period, but a valid assessment for the near-term period exists. (R 1.2)  OR  The responsible entity is non-compliant with one of the sub-components of requirement R1.3 (R1.3.1 through R1.3.12).  OR  The responsible entity has considered the NERC Category C contingencies applicable to their system, but was deficient with	The responsible entity has failed to demonstrate a valid assessment for the near-term period, but a valid assessment for the long-term period exists. (R1.2)  OR  The responsible entity is non-compliant with two of the sub-components of requirement R1.3 (R1.3.1 through 1.3.12).  OR  The responsible entity has considered the NERC Category C contingencies applicable to their system, but was deficient with	The responsible entity is non-compliant with three of the sub-components of requirement R1.3 (R1.3.1 through 1.3.12).  OR  The responsible entity has considered the NERC Category C contingencies applicable to their system, but was deficient with respect to more than 10% up to (and including) 15% of all applicable contingencies. (R1.5)	The responsible entity did not perform the transmission assessments annually. (R1.1)  OR  The responsible entity has failed to demonstrate a valid assessment for the near-term period and long-term planning period. (R1.2)  OR  The responsible entity is non-compliant with four or more of the subcomponents of requirement R1.3 (R1.3.1 through 1.3.12).	Revised to remove prior multi-component and incorporated sub-requirements (components) into VSLs for the main requirement.  Changed percentiles in R1 to 5%, 10%, 15%.  Modified % language for consistency between standards.		

	Standard Number TPL-003-0 — System Performance Following Loss of Two or More BES Elements							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
	respect to 5% or less of all applicable contingencies. (R1.5)	respect to more than 5% up to (and including) 10% of all applicable contingencies. (R1.5)		The responsible entity has failed to demonstrate that a corrective action plan exists in order to satisfy Category C planning requirements. (R1.4)  OR  The responsible entity has considered the NERC Category C contingencies applicable to their system, but was deficient with respect to more than 15% of all applicable contingencies. (R1.5)				
Original R1.1.	N/A	N/A	N/A	The assessments were not made on an annual basis.				
Revised R1.1.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			

	Standard Number TPL-003-0 — System Performance Following Loss of Two or More BES Elements							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R1.2.	The responsible entity has failed to demonstrate a valid assessment for the long-term period, but a valid assessment for the near-term period exists.	The responsible entity has failed to demonstrate a valid assessment for the near-term period, but a valid assessment for the long-term period exists.	N/A	The responsible entity has failed to demonstrate a valid assessment for the near-term period AND long-term planning period.				
Revised R1.2.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R1.3.	The responsible entity is non-compliant with 25% or less of the subcomponents.	The responsible entity is non-compliant with more than 25% but less than 50% of the sub-components.	The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.	The responsible entity is non-compliant with 75% or more of the subcomponents.				
Revised R1.3.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R1.3.1.	N/A	The responsible entity provided evidence through current or past studies that selected NERC Category C contingencies were evaluated, however, no rational was provided to indicate why the remaining	N/A	The responsible entity did not provided evidence through current or past studies to indicate that any NERC Category C contingencies were evaluated.				

	Standard Number TPL-003-0 — System Performance Following Loss of Two or More BES Elements						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
		Category C contingencies for their system were not evaluated.					
Revised R1.3.1.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		
Original R1.3.2.	N/A	N/A	N/A	The responsible entity has failed to cover critical system conditions and study years as deemed appropriate.			
Revised R1.3.2.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		
Original R1.3.3.	The responsible entity's most recent long-term studies (and/or system simulation testing) were not performed in the most recent annual period AND significant system changes (actual or proposed) indicate that past studies (and/or system testing) are no	The responsible entity's most recent near-term studies (and/or system simulation testing) were not performed in the most recent annual period AND significant system changes (actual or proposed) indicate that past studies (and/or system testing) are	N/A	The responsible entity's most recent near-term studies (and/or system simulation testing) AND most recent long-term studies (and/or system testing) were not performed in the most recent annual period AND significant system changes (actual or proposed) indicate that past			

	Standard Number TPL-003-0 — System Performance Following Loss of Two or More BES Elements							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
	longer valid.	no longer valid.		studies (and/or system simulation testing) are no longer valid.				
Revised R1.3.3.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R1.3.4.	N/A	N/A	N/A	The responsible entity failed to produce evidence of a past or current year long-term study and/or system simulation testing (beyond 5-year planning horizon) when past or current year near-term studies and/or system testing show marginal conditions that may require longer lead-time solutions.				
Revised R1.3.4.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R1.3.5.	The system model(s) used for current or past analysis did not properly represent up to (but less than) 25%	The system model(s) used for current or past analysis did not properly represent 25% or more but less than	The system model(s) used for current or past analysis did not properly represent 50% or more but less than	The system model(s) used for current or past analysis did not properly represent 75% or more of the firm				

	Standard Number TPL-003-0 — System Performance Following Loss of Two or More BES Elements							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
	of the firm transfers to/from the responsible entity's service territory.	50% of the firm transfers to/from the responsible entity's service territory.	75% of the firm transfers to/from the responsible entity's service territory.	transfers to/from the responsible entity's service territory.				
Revised R1.3.5.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R1.3.6.	N/A	N/A	N/A	The responsible entity has failed to produce evidence of a valid current or past study and/or system simulation testing reflecting analysis over a range of forecast system demands.				
Revised R1.3.6.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R1.3.7.	N/A	N/A	N/A	No past or current study results exists showing Category C contingency system analysis.				
Revised R1.3.7.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			

	Standard Number TPL-003-0 — System Performance Following Loss of Two or More BES Elements							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
Original R1.3.8.	The responsible entity's transmission model used for past or current studies and/or system simulation testing properly reflects existing facilities, but is deficient in reflecting planned facilities.	The responsible entity's transmission model used for past or current studies and/or system simulation testing properly reflects planned facilities, but is deficient in reflecting existing facilities.	N/A	The responsible entity's transmission model used for past or current studies and/or system simulation testing is deficient in reflecting existing AND planned facilities.				
Revised R1.3.8.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R1.3.9.	N/A	N/A	N/A	The responsible entity has failed to ensure in a past or current study and/or system simulation testing that sufficient reactive power resources are available to meet required system performance.				
Revised R1.3.9.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.			
Original R1.3.10.	N/A	N/A	The responsible entity's transmission model used	The responsible entity's transmission model used				

	Standard Number TPL-003-0 — System Performance Following Loss of Two or More BES Elements							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
			for past or current studies is deficient with respect to the effects of planned protection systems, including any backup or redundant systems.	for past or current studies is deficient with respect to the effects of existing protection systems, including any backup or redundant systems.				
Revised R1.3.10.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R1.3.11.	N/A	N/A	The responsible entity's transmission model used for past or current studies is deficient with respect to the effects of planned control devices.	The responsible entity's transmission model used for past or current studies is deficient with respect to the effects of existing control devices.				
Revised R1.3.11.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R1.3.12.	N/A	N/A	N/A	The responsible entity's transmission model used for past or current studies is deficient with respect to the inclusion of planned maintenance outages of bulk electric transmission				

	Standard Number TPL-003-0 — System Performance Following Loss of Two or More BES Elements						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
				facilities.			
Revised R1.3.12.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		
Original R1.4.	N/A	N/A	N/A	The responsible entity has failed to demonstrate that a corrective action plan exists in order to satisfy Category C planning requirements.			
Revised R1.4.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		
Original R1.5.	The responsible entity has considered the NERC Category C contingencies applicable to their system, but was deficient with respect to 25% or less of all applicable contingencies.	The responsible entity has considered the NERC Category C contingencies applicable to their system, but was deficient with respect to more than 25% but less than 50% of all applicable contingencies.	The responsible entity has considered the NERC Category C contingencies applicable to their system, but was deficient with respect to more than 50% but less than 75% of all applicable contingencies.	The responsible entity has considered the NERC Category C contingencies applicable to their system, but was deficient 75% or more of all applicable contingencies.			
Revised R1.5.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main		

	Standard Number TPL-003-0 — System Performance Following Loss of Two or More BES Elements							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
					requirement.			
Original R2.	The responsible entity is non-compliant with 25% or less of the subcomponents.	The responsible entity is non-compliant with more than 25% but less than 50% of the sub-components.	The responsible entity is non-compliant with 50% or more but less than 75% of the sub-components.	The responsible entity is non-compliant with 75% or more of the subcomponents.				
Revised R2.	N/A	The responsible entity has failed to review the continuing need for previously identified facility additions through subsequent annual assessments. (R2.2)	The responsible entity provided documented evidence of corrective action plans in order to satisfy Category C planning requirements, but failed to include an implementation schedule with in-service dates. (R2.1.1 and R2.1.2)  OR  The responsible entity failed to consider necessary lead times to implement its corrective action plan. (R2.1.3)	The responsible entity has failed to provide documented evidence of corrective action plans in order to satisfy Category C planning requirements. (R2.1)	Revised, removed prior multi-component and incorporated sub-requirements (components) into VSLs for the main requirement.  Replaced, "demonstrate" with "review" in moderate VSL			
Original R2.1.	N/A	N/A	N/A	The responsible entity has failed to provide documented evidence of				

	Standard Number TPL-003-0 — System Performance Following Loss of Two or More BES Elements							
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change			
				corrective action plans in order to satisfy Category C planning requirements.				
Revised R2.1.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R2.1.1.	N/A	N/A	N/A	A schedule for the responsible entity's corrective action plan does not exist.				
Revised R2.1.1.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.			
Original R2.1.2.	N/A	N/A	N/A	Anticipated in-service dates, for the responsible entity's corrective action plan does not exist. This would reflect effective dates for pre-contingency operating procedures or inservice dates for proposed system changes.				
Revised R2.1.2.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components)			

	Standard Number TPL-003-0 — System Performance Following Loss of Two or More BES Elements						
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change		
					into VSLs for the main requirement.		
Original R2.1.3.	N/A	The responsible entity failed to consider necessary lead times to implement its corrective action plan.	N/A	N/A			
Revised R2.1.3.	N/A	N/A	N/A	N/A	Incorporated sub- requirements (components) into VSLs for the main requirement.		
Original R2.2.	N/A	The responsible entity has failed to demonstrate the continuing need for previously identified facility additions through sub-sequent annual assessments.	N/A	N/A			
Revised R2.2.	N/A	N/A	N/A	N/A	Incorporated sub-requirements (components) into VSLs for the main requirement.		
Original R3.	N/A	The responsible entity documented the results of its reliability assessments and corrective plans but did not annually provided them	N/A	The responsible entity DID NOT document the results of its annual reliability assessments and corrective plans AND did not			

	Standard Number TPL-003-0 — System Performance Following Loss of Two or More BES Elements								
R#	Lower VSL	Moderate VSL	High VSL	Severe VSL	Explanation of Change				
		to its respective NERC Regional Reliability Organization(s) as required by the Regional Reliability Organization		annually provided them to its respective NERC Regional Reliability Organization(s) as required by the Regional Reliability Organization					
Revised R3.	N/A	The responsible entity documented the results of its reliability assessments and corrective plans but did not annually provide them to its respective NERC Regional Reliability Organization(s) as required by the Regional Reliability Organization.	N/A	The responsible entity DID NOT document the results of its annual reliability assessments and corrective plans AND did not annually provide them to its respective NERC Regional Reliability Organization(s) as required by the Regional Reliability Organization.	No changes made. Corrected grammar.				