

Violation Risk Factor and Violation Severity Level

Justifications

Project 2021-04 Modifications to PRC-002 – Phase II (PRC-002-5)

This document provides the standard drafting team's (SDT's) justification for assignment of violation risk factors (VRFs) and violation severity levels (VSLs) for each requirement in PRC-002-5. Each requirement is assigned a VRF and a VSL. These elements support the determination of an initial value range for the Base Penalty Amount regarding violations of requirements in FERC-approved Reliability Standards, as defined in the Electric Reliability Organizations (ERO) Sanction Guidelines. The SDT applied the following NERC criteria and FERC Guidelines when developing the VRFs and VSLs for the requirements.

NERC Criteria for Violation Risk Factors

High Risk Requirement

A requirement that, if violated, could directly cause or contribute to Bulk Electric System instability, separation, or a cascading sequence of failures, or could place the Bulk Electric System at an unacceptable risk of instability, separation, or cascading failures; or, 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 Electric System instability, separation, or a cascading sequence of failures, or could place the Bulk Electric System at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

Medium Risk Requirement

A requirement that, if violated, could directly affect the electrical state or the capability of the Bulk Electric System, or the ability to effectively monitor and control the Bulk Electric System. However, violation of a medium risk requirement is unlikely to lead to Bulk Electric System instability, separation, or cascading failures; or, a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly and adversely affect the electrical state or capability of the Bulk Electric System, or the ability to effectively monitor, control, or restore the Bulk Electric System. However, violation of a medium risk requirement is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

Lower Risk Requirement

A requirement that is administrative in nature and a requirement that, if violated, would not be expected to adversely affect the electrical state or capability of the Bulk Electric System, or the ability to effectively monitor and control the Bulk Electric System; or, a requirement that is administrative in nature and 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 adversely affect the electrical state or capability of the Bulk Electric System, or the ability to effectively monitor, control, or restore the Bulk Electric System.

FERC Guidelines for Violation Risk Factors

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

FERC seeks to ensure that VRFs assigned to Requirements of Reliability Standards in these identified areas appropriately reflect their historical critical impact on the reliability of the Bulk-Power System. In the VSL Order, FERC listed critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System:

- 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

FERC expects a rational connection between the sub-Requirement VRF assignments and the main Requirement VRF assignment.

Guideline (3) – Consistency among Reliability Standards

FERC expects the assignment of VRFs 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 VRF 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.

NERC Criteria for Violation Severity Levels

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

VSLs should be based on NERC’s overarching criteria 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.	The performance or product measured meets the majority of the intent of 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.	The performance or product measured does not substantively meet the intent of the requirement.

FERC Order of Violation Severity Levels

The FERC VSL guidelines are presented below, followed by an analysis of whether the VSLs proposed for each requirement in the standard meet the FERC Guidelines for assessing VSLs:

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

Compare the VSLs to any prior levels of non-compliance and avoid significant changes that may encourage a lower level of compliance than was required when levels of non-compliance were used.

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

A violation of a “binary” type requirement must be a “Severe” VSL.

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 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.

VRF Justification for PRC-002-5, Requirement R1

The VRF did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VSL Justification for PRC-002-5, Requirement R1

The VSL did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VRF Justification for PRC-002-5, Requirement R2

The VRF did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VSL Justification for PRC-002-5, Requirement R2

The VSL did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VRF Justification for PRC-002-5, Requirement R3

The VRF did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VSL Justification for PRC-002-5, Requirement R3

VSLs for PRC-002-5, Requirement R3			
Lower	Moderate	High	Severe
The Transmission Owner or Generator Owner had FR data as directed by Requirement R3, Parts 3.1 and 3.2 that covers more than 80 percent, but less than 100 percent of the total required electrical quantities, which is the product of the total	The Transmission Owner or Generator Owner had FR data as directed by Requirement R3, Parts 3.1 and 3.2 that covers more than 70 percent, but less than or equal to 80 percent of the total required electrical quantities, which is the product	The Transmission Owner or Generator Owner had FR data as directed by Requirement R3, Parts 3.1 and 3.2 that covers more than 60 percent, but less than or equal to 70 percent of the total required electrical quantities, which is the product	The Transmission Owner or Generator Owner had FR data as directed by Requirement R3, Parts 3.1 and 3.2 that covers less than or equal to 60 percent of the total required electrical quantities, which is the product of the total number of

number of monitored BES Elements and the number of specified electrical quantities for each BES Element.	of the total number of monitored BES Elements and the number of specified electrical quantities for each BES Element.	of the total number of monitored BES Elements and the number of specified electrical quantities for each BES Element.	monitored BES Elements and the number of specified electrical quantities for each BES Element.
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VSL Justifications for PRC-002-5, Requirement R3

<p>FERC VSL G1</p> <p>Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The proposed VSLs do not have the unintended consequence of lowering the level of compliance.</p>
<p>FERC VSL G2</p> <p>Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties</p> <p><u>Guideline 2a</u>: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent</p> <p><u>Guideline 2b</u>: Violation Severity Level Assignments that Contain Ambiguous Language</p>	<p>The proposed VSLs are not binary and do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.</p>
<p>FERC VSL G3</p> <p>Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>The proposed VSLs use the same terminology as used in the associated requirement and are, therefore, consistent with the requirement.</p>
<p>FERC VSL G4</p>	<p>Each VSL is based on a single violation and not cumulative violations.</p>

VSL Justifications for PRC-002-5, Requirement R3

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

VRF Justification for PRC-002-5, Requirement R4

The VRF did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VSL Justification for PRC-002-5, Requirement R4

VSLs for PRC-002-5, Requirement R4

Lower	Moderate	High	Severe
The Transmission Owner or Generator Owner had FR data that meets more than 80 percent, but less than 100 percent of the total recording parameters as specified in Requirement R4.	The Transmission Owner or Generator Owner had FR data that meets more than 70 percent, but less than or equal to 80 percent of the total recording parameters as specified in Requirement R4.	The Transmission Owner or Generator Owner had FR data that meets more than 60 percent, but less than or equal to 70 percent of the total recording parameters as specified in Requirement R4.	The Transmission Owner or Generator Owner had FR data that meets less than or equal to 60 percent of the total recording parameters as specified in Requirement R4.

VSL Justifications for PRC-002-5, Requirement R4

FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	The proposed VSLs do not have the unintended consequence of lowering the level of compliance.
FERC VSL G2	The proposed VSLs are not binary and do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.

VSL Justifications for PRC-002-5, Requirement R4

<p>Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties</p> <p><u>Guideline 2a</u>: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent</p> <p><u>Guideline 2b</u>: Violation Severity Level Assignments that Contain Ambiguous Language</p>	
<p>FERC VSL G3</p> <p>Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>The proposed VSLs use the same terminology as used in the associated requirement and are, therefore, consistent with the requirement.</p>
<p>FERC VSL G4</p> <p>Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations</p>	<p>Each VSL is based on a single violation and not cumulative violations.</p>

VRF Justification for PRC-002-5, Requirement R5

The VRF did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VSL Justification for PRC-002-5, Requirement R5

The VSL did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VRF Justification for PRC-002-5, Requirement R6

The VRF did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VSL Justification for PRC-002-5, Requirement R6

VSLs for PRC-002-5, Requirement R6			
Lower	Moderate	High	Severe
The Transmission Owner had DDR data as directed by Requirement R6, Parts 6.1 through 6.4 that covered more than 80 percent, but less than 100 percent of the total required electrical quantities, which is the product of the total number of monitored BES Elements and the number of specified electrical quantities for each BES Element.	The Transmission Owner had DDR data as directed by Requirement R6, Parts 6.1 through 6.4 for more than 70 percent, but less than or equal to 80 percent of the total required electrical quantities, which is the product of the total number of monitored BES Elements and the number of specified electrical quantities for each BES Element.	The Transmission Owner had DDR data as directed by Requirement R6, Parts 6.1 through 6.4 for more than 60 percent, but less than or equal to 70 percent of the total required electrical quantities, which is the product of the total number of monitored BES Elements and the number of specified electrical quantities for each BES Element.	The Transmission Owner had DDR data as directed by Requirement R6, Parts 6.1 through 6.4 for less than 60 percent of the total required electrical quantities, which is the product of the total number of monitored BES Elements and the number of specified electrical quantities for each BES Element.

VSL Justifications for PRC-002-5, Requirement R6	
FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	The proposed VSLs do not have the unintended consequence of lowering the level of compliance.
FERC VSL G2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation	The proposed VSLs are not binary and do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.

VSL Justifications for PRC-002-5, Requirement R6

Severity Level Assignment Category for "Binary" Requirements Is Not Consistent <u>Guideline 2b</u> : Violation Severity Level Assignments that Contain Ambiguous Language	
FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	The proposed VSLs use the same terminology as used in the associated requirement and are, therefore, consistent with the requirement.
FERC VSL G4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations	Each VSL is based on a single violation and not cumulative violations.

VRF Justification for PRC-002-5, Requirement R7

The VRF did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VSL Justification for PRC-002-5, Requirement R7

VSLs for PRC-002-5, Requirement R7			
Lower	Moderate	High	Severe
The Generator Owner had DDR data as directed by Requirement R7, Parts 7.1 through 7.4 that covers more than 80 percent, but less than 100 percent of the	The Generator Owner had DDR data as directed by Requirement R7, Parts 7.1 through 7.4 for more than 70 percent, but less than or equal to 80 percent of	The Generator Owner had DDR data as directed by Requirement R7, Parts 7.1 through 7.4 for more than 60 percent, but less than or equal to 70 percent of	The Generator Owner had DDR data as directed by Requirement R7, Parts 7.1 through 7.4 for less than 60 percent of the total required electrical quantities,

total required electrical quantities, which is the product of the total number of monitored BES Elements and the number of specified electrical quantities for each BES Element.	the total required electrical quantities, which is the product of the total number of monitored BES Elements and the number of specified electrical quantities for each BES Element.	the total required electrical quantities, which is the product of the total number of monitored BES Elements and the number of specified electrical quantities for each BES Element.	which is the product of the total number of monitored BES Elements and the number of specified electrical quantities for each BES Element.
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VSL Justifications for PRC-002-5, Requirement R7

<p>FERC VSL G1</p> <p>Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The proposed VSLs do not have the unintended consequence of lowering the level of compliance.</p>
<p>FERC VSL G2</p> <p>Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties</p> <p><u>Guideline 2a</u>: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent</p> <p><u>Guideline 2b</u>: Violation Severity Level Assignments that Contain Ambiguous Language</p>	<p>The proposed VSLs are not binary and do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.</p>
<p>FERC VSL G3</p> <p>Violation Severity Level Assignment Should Be Consistent with the</p>	<p>The proposed VSLs use the same terminology as used in the associated requirement and are, therefore, consistent with the requirement.</p>

VSL Justifications for PRC-002-5, Requirement R7

Corresponding Requirement	
FERC VSL G4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations	Each VSL is based on a single violation and not cumulative violations.

VRF Justification for PRC-002-5, Requirement R8

The VRF did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VSL Justification for PRC-002-5, Requirement R8

The VSL did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VRF Justification for PRC-002-5, Requirement R9

The VRF did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VSL Justification for PRC-002-5, Requirement R9

The VSL did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VRF Justification for PRC-002-5, Requirement R10

The VRF did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VSL Justification for PRC-002-5, Requirement R10

The VSL did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VRF Justification for PRC-002-5, Requirement R11

The VRF did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VSL Justification for PRC-002-5, Requirement R11

VSLs for PRC-002-5, Requirement R11

Lower	Moderate	High	Severe
<p>The Transmission Owner or Generator Owner as directed by Requirement R11, Part 11.2 provided the requested data more than 30 calendar days, but less than or equal to 40 calendar days after the request, unless an extension was granted by the requesting authority.</p> <p>OR</p> <p>The Transmission Owner or Generator Owner as directed by Requirement R11 provided more than 90 percent, but less than 100 percent of the requested data.</p> <p>OR</p> <p>The Transmission Owner or Generator Owner as directed by Requirement R11, Parts 11.3 through 11.5 provided more than 90 percent of the data, but less than 100 percent of the data in the proper data format.</p>	<p>The Transmission Owner or Generator Owner as directed by Requirement R11, Part 11.2 provided the requested data more than 40 calendar days, but less than or equal to 50 calendar days after the request, unless an extension was granted by the requesting authority.</p> <p>OR</p> <p>The Transmission Owner or Generator Owner as directed by Requirement R11 provided more than 80 percent, but less than or equal to 90 percent of the requested data.</p> <p>OR</p> <p>The Transmission Owner or Generator Owner as directed by Requirement R11, Parts 11.3 through 11.5 provided more than 80 percent of the data, but less than or equal to 90 percent of the data in the proper data format.</p>	<p>The Transmission Owner or Generator Owner as directed by Requirement R11, Part 11.2 provided the requested data more than 50 calendar days, but less than or equal to 60 calendar days after the request, unless an extension was granted by the requesting authority.</p> <p>OR</p> <p>The Transmission Owner or Generator Owner as directed by Requirement R11 provided more than 70 percent, but less than or equal to 80 percent of the requested data.</p> <p>OR</p> <p>The Transmission Owner or Generator Owner as directed by Requirement R11, Parts 11.3 through 11.5 provided more than 70 percent of the data, but less than or equal to 80 percent of the data in the proper data format.</p>	<p>The Transmission Owner or Generator Owner as directed by Requirement R11, Part 11.2 failed to provide the requested data more than 60 calendar days after the request, unless an extension was granted by the requesting authority.</p> <p>OR</p> <p>The Transmission Owner or Generator Owner as directed by Requirement R11 failed to provide less than or equal to 70 percent of the requested data.</p> <p>OR</p> <p>The Transmission Owner or Generator Owner as directed by Requirement R11, Parts 11.3 through 11.5 provided less than or equal to 70 percent of the data in the proper data format.</p>

VSL Justifications for PRC-002-5, Requirement R11

<p>FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The proposed VSLs do not have the unintended consequence of lowering the level of compliance.</p>
<p>FERC VSL G2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties <u>Guideline 2a</u>: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent <u>Guideline 2b</u>: Violation Severity Level Assignments that Contain Ambiguous Language</p>	<p>The proposed VSLs are not binary and do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.</p>
<p>FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>The proposed VSLs use the same terminology as used in the associated requirement and are, therefore, consistent with the requirement.</p>
<p>FERC VSL G4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations</p>	<p>Each VSL is based on a single violation and not cumulative violations.</p>

VRF Justification for PRC-002-5, Requirement R12

The VRF did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VSL Justification for PRC-002-5, Requirement R12

The VSL did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VRF Justification for PRC-002-5, Requirement R12

The VRF did not change from the previously FERC approved PRC-002-4 Reliability Standard.

VSL Justification for PRC-002-5, Requirement R12

The VSL did not change from the previously FERC approved PRC-002-4 Reliability Standard.