

Violation Risk Factor and Violation Severity Level Justifications

Project 2021-07 Extreme Cold Weather Grid Operations, Preparedness, and Coordination

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 Project 2021-07 Extreme Cold Weather Grid Operations, Preparedness, and Coordination. 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.

EOP-011-3

VRF Justification for EOP-011-3, Requirement R1

The VRF did not change from the previously FERC approved EOP-011-2 Reliability Standard.

VSL Justification for EOP-011-3, Requirement R1

The VSL did not change from the previously FERC approved EOP-011-2 Reliability Standard.

VRF Justification for EOP-011-3, Requirement R2

The VRF did not change from the previously FERC approved EOP-011-2 Reliability Standard.

VSL Justification for EOP-011-3, Requirement R2

The VSL did not change from the previously FERC approved EOP-011-2 Reliability Standard.

VRF Justification for EOP-011-3, Requirement R3

The VRF did not change from the previously FERC approved EOP-011-2 Reliability Standard.

VSL Justification for EOP-011-3, Requirement R3

The VSL did not change from the previously FERC approved EOP-011-2 Reliability Standard.

VRF Justification for EOP-011-3, Requirement R4

The VRF did not change from the previously FERC approved EOP-011-2 Reliability Standard.

VSL Justification for EOP-011-3, Requirement R4

The VSL did not change from the previously FERC approved EOP-011-2 Reliability Standard.

VRF Justification for EOP-011-3, Requirement R5

The VRF did not change from the previously FERC approved EOP-011-2 Reliability Standard.

VSL Justification for EOP-011-3, Requirement R5

The VSL did not change from the previously FERC approved EOP-011-2 Reliability Standard.

VRF Justification for EOP-011-3, Requirement R6

The VRF did not change from the previously FERC approved EOP-011-2 Reliability Standard.

VSL Justification for EOP-011-3, Requirement R6

The VSL did not change from the previously FERC approved EOP-011-2 Reliability Standard.

EOP-012-1

VRF Justifications for EOP-012-1, Requirement R1	
Proposed VRF	Medium
NERC VRF Discussion	A VRF of Medium is appropriate due to the fact that not designing or implementing freeze protection measures for a unit to operate during the local cold weather, that can be expected, could directly affect the electrical state or the capability of the bulk electric system, but 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. Therefore, it is consistent with the definition of a Medium VRF.
FERC VRF G1 Discussion Guideline 1- Consistency with Blackout Report	This VRF is consistent with the identified areas from the FERC list of critical areas in the Final Blackout Report.
FERC VRF G2 Discussion Guideline 2- Consistency within a Reliability Standard	This requirement has only a main VRF and no different sub-requirement VRFs.
FERC VRF G3 Discussion Guideline 3- Consistency among Reliability Standards	This VRF is consistent with other VRFs that address similar reliability goals in different Reliability Standards.
FERC VRF G4 Discussion Guideline 4- Consistency with NERC Definitions of VRFs	This VRF is consistent with the definition of a medium VRF requirement per the criteria filed with FERC as part of the ERO's Sanctions Guidelines.
FERC VRF G5 Discussion Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation	This requirement does not mingle a higher risk reliability objective and a lesser risk reliability objective. Therefore, the VRF reflects the risk of the whole requirement.

VSLs for EOP-012-1, Requirement R1

Lower	Moderate	High	Severe
<p>The Generator Owner did not have freeze protection measure(s) meeting the criteria in Requirement R1 Parts 1.1 – 1.3 for up to 5% its units.</p>	<p>The Generator Owner did not have freeze protection measure(s) meeting the criteria in Requirement R1 Parts 1.1 – 1.3 for more than 5%, but less than or equal to 10% of its units.</p>	<p>The Generator Owner did not have freeze protection measure(s) meeting the criteria in Requirement R1 Parts 1.1 – 1.3 for more than 10%, but less than or equal to 20% of its units.</p>	<p>The Generator Owner did not have freeze protection measure(s) meeting the criteria in Requirement R1 Parts 1.1 – 1.3 for more than 20% of its units; OR The Generator Owner did not develop or implement a CAP as required by Requirement R1.</p>

VSL Justifications for EOP-012-1, Requirement R1

<p>FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The requirement is new. Therefore, 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 Justifications for EOP-012-1, Requirement R2

Proposed VRF	Low
NERC VRF Discussion	A VRF of Low is appropriate due to the fact that this 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.
FERC VRF G1 Discussion Guideline 1- Consistency with Blackout Report	This VRF is consistent with the identified areas from the FERC list of critical areas in the Final Blackout Report.
FERC VRF G2 Discussion Guideline 2- Consistency within a Reliability Standard	This requirement has only a main VRF and no different sub-requirement VRFs.
FERC VRF G3 Discussion Guideline 3- Consistency among Reliability Standards	This VRF is consistent with other VRFs that address similar reliability goals in different Reliability Standards.
FERC VRF G4 Discussion Guideline 4- Consistency with NERC Definitions of VRFs	This VRF is consistent with the definition of a low VRF requirement per the criteria filed with FERC as part of the ERO's Sanctions Guidelines.
FERC VRF G5 Discussion Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation	This requirement does not mingle a higher risk reliability objective and a lesser risk reliability objective. Therefore, the VRF reflects the risk of the whole requirement.

VSLs for EOP-012-1, Requirement R2			
Lower	Moderate	High	Severe
<p>The Generator Owner completed the review required in Requirement R2, but was late by 30 calendar days or less.</p> <p>OR</p> <p>The Generator Owner did not document its determination and the constraints described in Requirement R2 Part 2.1 for up to 5% its units.</p>	<p>The Generator Owner completed the review required in Requirement R2, but was late by greater than 30 calendar days but less than or equal to 60 calendar days.</p> <p>OR</p> <p>The Generator Owner did not document its determination and the constraints described in Requirement R1 Part 2.1 for more than 5%, but less than or equal to 10% of its units.</p>	<p>The Generator Owner completed the review required in Requirement R2, but was late by greater than 60 calendar days.</p> <p>OR</p> <p>The Generator Owner did not document its determination and the constraints described in Requirement R1 Part 2.1 for more than 10%, but less than or equal to 20% of its units.</p>	<p>The Generator Owner did not complete a review.</p> <p>OR</p> <p>The Generator Owner did not document its determination and the constraints described in Requirement R1 Part 2.1 for more than 20% of its units.</p>

VSL Justifications for EOP-012-1, Requirement R2	
<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 requirement is new. Therefore, 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: The Single Violation Severity Level Assignment Category</u></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>

VSL Justifications for EOP-012-1, Requirement R2

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 EOP-012-1, Requirement R3

The VRF did not change from the previously FERC approved Reliability Standard EOP-011-2 Requirement R7.

VSL Justification for EOP-012-1, Requirement R3

The VSLs did not substantively change from the previously FERC approved Reliability Standard EOP-011-2 Requirement R7. A minor clarification was made to remove the word “fully” from the High VSL.

VRF Justifications for EOP-012-1, Requirement R4

Proposed VRF	Low
NERC VRF Discussion	A VRF of Low is appropriate due to the fact that this requirement 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

VRF Justifications for EOP-012-1, Requirement R4

Proposed VRF	Low
FERC VRF G1 Discussion Guideline 1- Consistency with Blackout Report	This VRF is consistent with the identified areas from the FERC list of critical areas in the Final Blackout Report.
FERC VRF G2 Discussion Guideline 2- Consistency within a Reliability Standard	This requirement has only a main VRF and no different sub-requirement VRFs.
FERC VRF G3 Discussion Guideline 3- Consistency among Reliability Standards	This VRF is consistent with other VRFs that address similar reliability goals in different Reliability Standards.
FERC VRF G4 Discussion Guideline 4- Consistency with NERC Definitions of VRFs	This VRF is consistent with the definition of a low VRF requirement per the criteria filed with FERC as part of the ERO's Sanctions Guidelines.
FERC VRF G5 Discussion Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation	This requirement does not mingle a higher risk reliability objective and a lesser risk reliability objective. Therefore, the VRF reflects the risk of the whole requirement.

VSLs for EOP-012-1, Requirement R4

Lower	Moderate	High	Severe
The Generator Owner completed the review required in Requirement R4, but was late by 30 calendar days or less.	The Generator Owner completed the review required in Requirement R4, but was late by greater than 30 calendar days but	The Generator Owner's review failed to include one of the applicable requirement parts in	The Generator Owner's review failed to include two or more of the applicable requirement parts in

	less than or equal to 60 calendar days.	Requirement R4 Parts 4.1 through 4.3; OR The Generator Owner completed the review required in Requirement R4, but was late by greater than 60 calendar days.	Requirement R4 Parts 4.1 through 4.3; OR The Generator Owner does not have a completed review. OR The Generator Owner did not update the cold weather preparedness plan.
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VSL Justifications for EOP-012-1, Requirement R4	
<p>FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The requirement is new. Therefore, 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</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>The proposed VSLs use the same terminology as used in the associated requirement and are, therefore,</p>

VSL Justifications for EOP-012-1, Requirement R4	
Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	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 EOP-012-1, Requirement R5

The VRF did not change from the previously FERC approved EOP-011-2 Requirement R8 Reliability Standard.

VSL Justification for EOP-012-1, Requirement R5

The VSL did not substantively change from the previously FERC approved Reliability Standard EOP-011-2 Requirement R8. The language was updated to reflect the addition of “annual”, consistent with the revised requirement language for the periodicity of the required generating unit-specific training.

VRF Justifications for EOP-012-1, Requirement R6	
Proposed VRF	High
NERC VRF Discussion	A VRF of High is appropriate due to the fact that this requirement to take corrective actions if a generating unit experiences a derate, failure to start or forced outage due to freezing event 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.
FERC VRF G1 Discussion Guideline 1- Consistency with Blackout Report	This VRF is consistent with the identified areas from the FERC list of critical areas in the Final Blackout Report.

VRF Justifications for EOP-012-1, Requirement R6	
Proposed VRF	High
FERC VRF G2 Discussion Guideline 2- Consistency within a Reliability Standard	This requirement has only a main VRF and no different sub-requirement VRFs.
FERC VRF G3 Discussion Guideline 3- Consistency among Reliability Standards	This VRF is consistent with other VRFs that address similar reliability goals in different Reliability Standards.
FERC VRF G4 Discussion Guideline 4- Consistency with NERC Definitions of VRFs	This VRF is consistent with the definition of a high VRF requirement per the criteria filed with FERC as part of the ERO's Sanctions Guidelines.
FERC VRF G5 Discussion Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation	This requirement does not mingle a higher risk reliability objective and a lesser risk reliability objective. There for the VRF reflects the risk of the whole requirement.

VSLs for EOP-012-1, Requirement R6			
Lower	Moderate	High	Severe
The Generator Owner did not develop a CAP meeting the elements in Requirement R6 parts 6.1 and 6.2 for 5% or less of its total events listed in Requirement R6.	The Generator Owner did not develop a CAP meeting the elements in Requirement R6 parts 6.1 and 6.2 for more 5%, but less than or equal to 10% of its total events listed in Requirement R6.	The Generator Owner did not develop a CAP meeting the elements in Requirement R6 parts 6.1 and 6.2 for more 10%, but less than or equal to 15% of its total events listed in Requirement R6.	The Generator Owner did not develop a CAP meeting the elements in Requirement R6 parts 6.1 and 6.2 for more 15% of its total events listed in Requirement R6.

VSL Justifications for EOP-012-1, Requirement R6

<p>FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The requirement is new. Therefore, 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>