

Violation Risk Factor and Violation Severity Level Justification

Project 2019-06 Cold Weather

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 Reliability Standards EOP-011-2, IRO-010-4, and TOP-003-5. 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 (BES) instability, separation, or a cascading sequence of failures, or could place the BES 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 BES instability, separation, or a cascading sequence of failures, or could place the BES 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 BES, or the ability to effectively monitor and control the BES. However, violation of a medium risk requirement is unlikely to lead to BES 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 BES, or the ability to effectively monitor, control, or restore the BES. However, violation of a medium risk requirement is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to BES 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 BES, or the ability to effectively monitor and control the BES; 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 BES, or the ability to effectively monitor, control, or restore the BES.

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-011-2

VRF Justification for EOP-011-2, Requirement R1

The VRF did not change from the previously FERC approved EOP-011-1 Reliability Standard.

VSL Justification for EOP-011-2, Requirement R1

The VSL did not change from the previously FERC approved EOP-011-1 Reliability Standard.

VRF Justification for EOP-011-2, Requirement R2

The VRF did not change from the previously FERC approved EOP-011-1 Reliability Standard.

VSL Justification for EOP-011-2, Requirement R2

The VSL did not change from the previously FERC approved EOP-011-1 Reliability Standard.

VRF Justification for EOP-011-2, Requirement R3

The VRF did not change from the previously FERC approved EOP-011-1 Reliability Standard.

VSL Justification for EOP-011-2, Requirement R3

The VSL did not change from the previously FERC approved EOP-011-1 Reliability Standard.

VRF Justification for EOP-011-2, Requirement R4

The VRF did not change from the previously FERC approved EOP-011-1 Reliability Standard.

VSL Justification for EOP-011-2, Requirement R4

The VSL did not change from the previously FERC approved EOP-011-1 Reliability Standard.

VRF Justification for EOP-011-2, Requirement R5

The VRF did not change from the previously FERC approved EOP-011-1 Reliability Standard.

VSL Justification for EOP-011-2, Requirement R5

The VSL did not change from the previously FERC approved EOP-011-1 Reliability Standard.

VRF Justification for EOP-011-2, Requirement R6

The VRF did not change from the previously FERC approved EOP-011-1 Reliability Standard.

VSL Justification for EOP-011-2, Requirement R6

The VSL did not change from the previously FERC approved EOP-011-1 Reliability Standard.

VRF Justification for EOP-011-2, Requirement R7

The justification for this new requirement is provided on the following page.

VSL Justification for EOP-011-2, Requirement R7

The justification for this new requirement is provided on the following page.

VRF Justification for EOP-011-2, Requirement R8

The justification for this new requirement is provided on the following page.

VSL Justification for EOP-011-2, Requirement R8

The justification for this new requirement is provided on the following page.

R#	VRF for EOP-011-2, Requirement R7	Justifications
R7	High	<ol style="list-style-type: none"> 1. Generator Owners must implement and maintain one or more cold weather preparedness plans for its generating facilities during cold weather conditions to avoid unnecessary trips, derates or failures to start 2. FERC Guideline 2 - Consistency within Reliability Standard EOP-011.

VSLs for EOP-011-2, Requirement R7				
R#	Lower	Moderate	High	Severe
R7	The Generator Owner implemented a cold weather preparedness plan(s) but failed to maintain it.	The Generator Owner's cold weather preparedness plan failed to include one of the applicable requirement Parts within Requirement R7.	<p>The Generator Owner had and maintained a cold weather preparedness plan(s) but failed to fully implement it.</p> <p>OR</p> <p>The Generator Owner's cold weather preparedness plan failed to include two of the applicable requirement Parts within Requirement R7.</p>	<p>The Generator Owner does not have a cold weather preparedness plan.</p> <p>OR</p> <p>The Generator Owner has a cold weather preparedness plan, but failed to include any of the applicable requirement Parts within Requirement R7.</p>

VSL Justification for EOP-011-2 Requirement R7

<p>FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>Requirement R7 is a new requirement and there were no prior levels of non-compliance. Requirement R7 includes four levels of non-compliance performance.</p>
<p>FERC VSL G2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties</p> <p>Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent</p> <p>Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language</p>	<p>The VSL assignments describe the Generator Owner’s responsibility to develop, maintain and implement a cold weather preparedness plan. Each VSL considers what or how many conditions or Parts of R7 have been met by the Generator Owner related to the cold weather preparedness plan.</p>
<p>FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>Failure of the Generator Owner to include certain conditions or Parts of R7 warrant VSLs that are less severe than the Generator Owner failing to develop any type of plan or not including all conditions or Parts of R7.</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>The VSL assignments for R7 will result in a single violation of this requirement that is independent of all other requirements of EOP-011-2 which are related to Operating Plans and not cold weather preparedness plans per R7.</p>

R#	VRF for EOP-011-2, Requirement R8	Justifications
R8	Medium	<ol style="list-style-type: none"> 1. Generator Owners or Generator Operator must provide generating unit-specific training to its maintenance and operations personnel. 2. FERC Guideline 2 - Consistency within Reliability Standard EOP-011.

VSLs for EOP-011-2, Requirement R8				
R#	Lower	Moderate	High	Severe
R8	<p>The Generator Owner or Generator Operator failed to provide generating unit-specific training as described in Requirement R8 to the greater of:</p> <ul style="list-style-type: none"> • one applicable personnel at a single generating unit; or • 5% or less of its total applicable personnel. 	<p>The Generator Owner or Generator Operator failed to provide generating unit-specific training as described in Requirement R8 to the greater of:</p> <ul style="list-style-type: none"> • two applicable personnel at a single generating unit; or • more than 5% or less than or equal to 10% of its total applicable personnel. 	<p>The Generator Owner or Generator Operator failed to provide generating unit-specific training as described in Requirement R8 to the greater of:</p> <ul style="list-style-type: none"> • three applicable personnel at a single generating unit; or • more than 10% or less than or equal to 15% of its total applicable personnel. 	<p>The Generator Owner or Generator Operator failed to provide generating unit-specific training as described in Requirement R8 to the greater of:</p> <ul style="list-style-type: none"> • four applicable personnel at a single generating unit; or • more than 15% of its total applicable personnel.

VSL Justification for EOP-011-2 Requirement R8	
<p>FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>Requirement R8 is a new requirement and there were no prior levels of non-compliance. Requirement R8 includes four levels of non-compliance performance.</p>
<p>FERC VSL G2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language</p>	<p>The VSL assignments describe the Generator Owner or Generator Operator's responsibility to provide generating unit-specific training to its maintenance and operations personnel. Each VSL considers what or how many personnel or percentage of personnel training has been completed in R8.</p>
<p>FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>The proposed VSL uses similar terminology to that used in the corresponding requirement, and is 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>The VSL assignments for R8 will result in a single violation of this requirement that is independent of all other requirements of EOP-011-2 which are related to Operating Plans and not cold weather preparedness plans per R8.</p>

IRO-010-4

VRF Justification for IRO-010-4, Requirement R1

The VRF did not change from the previously FERC approved IRO-010-3 Reliability Standard.

VSL Justification for IRO-010-4, Requirement R1

The VSLs were revised to reflect the addition of a new subpart.

VRF Justification for IRO-010-4, Requirement R2

The VRF did not change from the previously FERC approved IRO-010-3 Reliability Standard.

VSL Justification for IRO-010-4, Requirement R2

The VSL did not change from the previously FERC approved IRO-010-3 Reliability Standard.

VRF Justification for IRO-010-4, Requirement R3

The VRF did not change from the previously FERC approved IRO-010-3 Reliability Standard.

VSL Justification for IRO-010-4, Requirement R3

The VSL did not change from the previously FERC approved IRO-010-3 Reliability Standard.

VSLs for IRO-010-4, Requirement R1				
R#	Lower	Moderate	High	Severe
R1	The Reliability Coordinator did not include two or fewer of the parts (Part 1.1 through Part 1.5) of the documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Reliability Coordinator did not include three of the parts (Part 1.1 through Part 1.5) of the documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Reliability Coordinator did not include four of the parts (Part 1.1 through Part 1.5) of the documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Reliability Coordinator did not include any of the parts (Part 1.1 through Part 1.5) of the documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.

VSLs for IRO-010-4, Requirement R1

R#	Lower	Moderate	High	Severe
				OR, The Reliability Coordinator did not have a documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.

VSL Justification for IRO-010-4 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>Requirement R1 is an existing requirement with a new subpart developed, which Reliability Coordinator maintains a document specification for provisions for notifications of BES generating unit(s) during local forecasted cold weather.</p>
<p>FERC VSL G2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent</p>	<p>The VSL assignments describe the Reliability Coordinator responsibility to maintain a document specification for provisions for notifications of BES generating unit(s) during local forecasted cold weather. Each VSL considers what or how many conditions or Parts of R1 have been met by the Reliability Coordinator related to the cold weather preparedness plan.</p>

VSL Justification for IRO-010-4 Requirement R1

<p>Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language</p>	
<p>FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>Failure of the Generator Owner to include certain conditions or Parts of R7 warrant VSLs that are less severe than the Generator Owner failing to develop any type of plan or not including all conditions or Parts of R7.</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>The VSL assignments for R7 will result in a single violation of this requirement that is independent of all other requirements of EOP-011-2 which are related to Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.</p>

TOP-003-5

VRF Justification for TOP-003-5, Requirement R1

The VRF did not change from the previously FERC approved TOP-003-4 Reliability Standard.

VSL Justification for TOP-003-5, Requirement R1

The VSLs were revised to reflect the addition of a new subpart.

VRF Justification for TOP-003-05 Requirement R2

The VRF did not change from the previously FERC approved TOP-003-4 Reliability Standard.

VSL Justification for TOP-003-5, Requirement R2

The VSLs were revised to reflect the addition of a new subpart.

VRF Justification for TOP-003-5 Requirement R3

The VRF did not change from the previously FERC approved TOP-003-4 Reliability Standard.

VSL Justification for TOP-003-5, Requirement R3

The VSL did not change from the previously FERC approved TOP-003-4 Reliability Standard.

VRF Justification for TOP-003-5 Requirement R4

The VRF did not change from the previously FERC approved TOP-003-4 Reliability Standard.

VSL Justification for TOP-003-5, Requirement R4

The VSL did not change from the previously FERC approved TOP-003-4 Reliability Standard.

VSLs for TOP-003-5, Requirement R1				
R#	Lower	Moderate	High	Severe
R1	The Transmission Operator did not include two or fewer of the parts (Part 1.1 through Part 1.5) of the documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Transmission Operator did not include three of the parts (Part 1.1 through Part 1.5) of the documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Transmission Operator did not include four of the parts (Part 1.1 through Part 1.5) of the documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.	The Transmission Operator did not include any of the parts (Part 1.1 through Part 1.5) of the documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments. OR, The Transmission Operator did not have a documented specification for the data necessary for it to perform its Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.

VSL Justification for TOP-003-5 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>Requirement R1 is an existing requirement with a new subpart developed, which the Transmission Operator maintains a document specification for provisions for notifications of BES generating unit(s) during local forecasted cold weather.</p>
<p>FERC VSL G2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language</p>	<p>The VSL assignments describe the Transmission Operator responsibility to maintain a document specification for provisions for notifications of BES generating unit(s) during local forecasted cold weather. Each VSL considers subparts based on completion.</p>
<p>FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>The proposed VSL uses similar terminology to that used in the corresponding requirement, and is 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>The VSL assignments for Requirement R1 will result in a single violation of this requirement that is independent of all other requirements of TOP-003-5 which are related to Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.</p>

VSLs for TOP-003-5, Requirement R2				
R#	Lower	Moderate	High	Severe
R2	The Balancing Authority did not include two or fewer of the parts (Part 2.1 through Part 2.5) of the documented specification for the data necessary for it to perform its analysis functions and Real-time monitoring.	The Balancing Authority did not include three of the parts (Part 2.1 through Part 2.5) of the documented specification for the data necessary for it to perform its analysis functions and Real-time monitoring.	The Balancing Authority did not include four of the parts (Part 2.1 through Part 2.5) of the documented specification for the data necessary for it to perform its analysis functions and Real-time monitoring.	The Balancing Authority did not include any of the parts (Part 2.1 through Part 2.5) of the documented specification for the data necessary for it to perform its analysis functions and Real-time monitoring. OR, The Balancing Authority did not have a documented specification for the data necessary for it to perform its analysis functions and Real-time monitoring.

VSL Justification for TOP-003-5 Requirement R2	
FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Requirement R2 is an existing requirement with a new subpart developed, which the Balancing Authority maintains a document specification for provisions for notifications of BES generating unit(s) during local forecasted cold weather.
FERC VSL G2 Violation Severity Level Assignments Should Ensure	The VSL assignments describe the Balancing Authority responsibility to maintain a document specification for provisions for notifications of BES generating unit(s) during local forecasted cold weather. Each VSL considers subparts based on completion.

VSL Justification for TOP-003-5 Requirement R2

<p>Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language</p>	
<p>FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>The proposed VSL uses similar terminology to that used in the corresponding requirement, and is 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>The VSL assignments for Requirement R1 will result in a single violation of this requirement that is independent of all other requirements of TOP-003-5 which are related to Operational Planning Analyses, Real-time monitoring, and Real-time Assessments.</p>