

# Violation Risk Factor and Violation Severity Level Justifications

## IRO-001-3 – Reliability Coordination – Responsibilities and Authorities

### Violation Risk Factor and Violation Severity Level Justifications

This document provides the drafting team's justification for assignment of violation risk factors (VRFs) and violation severity levels (VSLs) for each requirement in: IRO-001-3 – Reliability Coordination – Responsibilities and Authorities

Each primary requirement is assigned a VRF and a set of one or more VSLs. 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 ERO Sanction Guidelines.

The Reliability Coordination Standard Drafting Team (SDT) applied the following NERC criteria and FERC Guidelines when proposing VRFs and VSL for the requirements under this project.

#### NERC Criteria – 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. A planning requirement that is administrative in nature.

### **FERC Violation Risk Factor Guidelines**

The SDT also considered consistency with the FERC Violation Risk Factor Guidelines for setting VRFs:<sup>1</sup>

#### ***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.

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:<sup>2</sup>

- 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

<sup>1</sup> North American Electric Reliability Corp., 119 FERC ¶ 61,145, order on reh'g and compliance filing, 120 FERC ¶ 61,145 (2007) ("VRF Rehearing Order").

<sup>2</sup> Id. at footnote 15.

- 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 sub-Requirement Violation Risk Factor assignments and the main Requirement Violation Risk Factor assignment.

***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.

The following discussion addresses how the SDT considered FERC’s VRF Guidelines 2 through 5. The team did not address Guideline 1 directly because of an apparent conflict between Guidelines 1 and 4. Whereas Guideline 1 identifies a list of topics that encompass nearly all topics within NERC’s Reliability Standards and implies that these requirements should be assigned a “High” VRF, Guideline 4 directs assignment of VRFs based on the impact of a specific requirement to the reliability of the system. The SDT believes that Guideline 4 is reflective of the intent of VRFs in the first instance and therefore concentrated its approach on the reliability impact of the requirements.

There are three requirements in IRO-001-3. None of the requirements were assigned a “Lower” VRF. Requirements R1, R2, and R3 are assigned a “High” VRF because this standard’s purpose is to establish the authority of Reliability Coordinators to direct other entities to prevent an Emergency or Adverse Reliability Impact.

**NERC Criteria – Violation Severity Levels**

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.

Violation severity levels should be based on the guidelines shown in the table below:

Lower	Moderate	High	Severe
<p>Missing a minor element (or a small percentage) of the required performance</p> <p>The performance or product measured has significant value as it almost meets the full intent of the requirement.</p>	<p>Missing at least one significant element (or a moderate percentage) of the required performance.</p> <p>The performance or product measured still has significant value in meeting the intent of the requirement.</p>	<p>Missing more than one significant element (or is missing a high percentage) of the required performance or is missing a single vital component.</p> <p>The performance or product has limited value in meeting the intent of the requirement.</p>	<p>Missing most or all of the significant elements (or a significant percentage) of the required performance.</p> <p>The performance measured does not meet the intent of the requirement or the product delivered cannot be used in meeting the intent of the requirement.</p>

**FERC Order of Violation Severity Levels**

FERC’s 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 and VSL Justifications**

<b>VRF Justifications – IRO-001-3, R1</b>	
<b>Proposed VRF</b>	<b>High</b>
NERC VRF Discussion	
FERC VRF G1 Discussion	Guideline 1- Consistency w/ Blackout Report: N/A
FERC VRF G2 Discussion	Guideline 2- Consistency within a Reliability Standard: The requirement has no sub-requirements; only one VRF was assigned so there is no conflict
FERC VRF G3 Discussion	Guideline 3- Consistency among Reliability Standards: There is a similar requirement (Requirement R1) in EOP-002-2.1 that is assigned a High VRF. The requirements are viewed as similar since they both refer to having responsibility to act to ensure reliability.
FERC VRF G4 Discussion	Guideline 4- Consistency with NERC Definitions of VRFs: Failure to act, direct actions or issue Reliability Directives may directly affect the electrical state or the capability of the bulk power system and may lead to bulk power system instability, separation, or cascading failures. Therefore, this requirement is assigned a High VRF.
FERC VRF G5 Discussion	Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation: The requirement contains only one objective; therefore, only one VRF was assigned.

Proposed VSLs for IRO-001-3, R1				
R#	Lower	Moderate	High	Severe
R1	N/A	N/A	N/A	<p>The Reliability Coordinator failed to exercise its authority to take action or direct actions, to prevent an identified event that resulted in an Emergency or Adverse Reliability Impact.</p> <p>OR</p> <p>The Reliability Coordinator failed to exercise its authority to take action or direct actions to mitigate the magnitude or duration of an event that resulted in an Emergency or Adverse Reliability Impact.</p>
VSL Justifications – IRO-001-3, R1				
NERC VSL Guidelines			Meets NERC’s VSL guidelines - Severe: The performance or product measured does not substantively meet the intent of the requirement.	
<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 requirement is comparable to approved EOP-002-2, Requirement. That is a binary requirement and thus, the VSL in the proposed standard is assigned a Severe VSL.</p>	
<p>FERC VSL G2</p> <p>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>Guideline 2a:</p> <p>N/A</p> <p>Guideline 2b:</p> <p>The proposed VSL does 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 VSL uses the same terminology as used in the associated 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 is based on a single violation and not cumulative violations.</p>

VRF Justifications – IRO-001-3, R2	
Proposed VRF	High
NERC VRF Discussion	
FERC VRF G1 Discussion	Guideline 1- Consistency w/ Blackout Report: N/A
FERC VRF G2 Discussion	Guideline 2- Consistency within a Reliability Standard: The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.
FERC VRF G3 Discussion	Guideline 3- Consistency among Reliability Standards: There is a similar requirement (Requirement R3) in TOP-001-1 that is assigned a High VRF. The requirements are viewed as similar since they both refer to the complying with directives unless the following the directive would violate safety, equipment, regulatory or statutory requirements.
FERC VRF G4 Discussion	Guideline 4- Consistency with NERC Definitions of VRFs: Failure to comply with a reliability directive could lead to bulk power system instability, separation, or cascading failures. Therefore, this requirement is assigned a High VRF.
FERC VRF G5	Guideline 5- Treatment of Requirements that Co-mingle More than One

VRF Justifications – IRO-001-3, R2	
Proposed VRF	High
Discussion	Obligation: The requirement contains only one objective; therefore, only one VRF was assigned.

Proposed VSLs for IRO-001-3, R2				
R#	Lower	Moderate	High	Severe
R7	N/A	N/A	N/A	The responsible entity did not comply with the Reliability Coordinator’s direction, unless compliance with the direction could not be physically implemented or unless such actions would have violated safety, equipment, regulatory, or statutory requirements.

VSL Justifications – IRO-001-3, R2	
NERC VSL Guidelines	Meets NERC’s VSL guidelines - Severe: The performance or product measured does not substantively meet the intent of the requirement.
FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	The proposed requirement is comparable to approved TOP-001-1, Requirement R3. That VSL is binary but the SDT notes that there are two possible levels of violation for this requirement. The two conditions are that 1) the responsible entity did not comply (severe) or 2) the responsible initiated action but did not fully comply (high). Thus, the VSL in the proposed standard does not lower the level of compliance currently required by setting VSLs that are less punitive than those already proposed.
FERC VSL G2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties	Guideline 2a: N/A  Guideline 2b:

<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 proposed VSL does 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 VSL uses the same terminology as used in the associated requirement, and is, 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>The VSL is based on a single violation and not cumulative violations</p>

VRF Justifications – IRO-001-3, R3	
Proposed VRF	High
NERC VRF Discussion	
FERC VRF G1 Discussion	Guideline 1- Consistency w/ Blackout Report: N/A
FERC VRF G2 Discussion	Guideline 2- Consistency within a Reliability Standard: The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.
FERC VRF G3	Guideline 3- Consistency among Reliability Standards:

<b>VRF Justifications – IRO-001-3, R3</b>	
<b>Proposed VRF</b>	<b>High</b>
Discussion	There is a similar requirement (Requirement R3) in TOP-001-1 that is assigned a High VRF. The requirements are viewed as similar since they both refer to informing the Reliability Coordinator when a directive cannot be performed.
FERC VRF G4 Discussion	Guideline 4- Consistency with NERC Definitions of VRFs: Failure to inform the Reliability Coordinator of the inability to perform a reliability directive would prevent the Reliability Coordinator from developing an alternative solution to the reliability concern. This could lead to directly affect the electrical state or the capability of the bulk power system and will not lead to bulk power system instability, separation, or cascading failures.
FERC VRF G5 Discussion	Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation: The requirement contains only one objective; therefore, only one VRF was assigned.

<b>Proposed VSLs for IRO-001-3, R3</b>				
<b>R#</b>	<b>Lower</b>	<b>Moderate</b>	<b>High</b>	<b>Severe</b>
R7	N/A	N/A	N/A	The responsible entity failed to inform its Reliability Coordinator upon recognition of its inability to perform as directed.

<b>VSL Justifications – IRO-001-3, R3</b>	
NERC VSL Guidelines	Meets NERC’s VSL guidelines - Severe: The performance or product measured does not substantively meet the intent of the requirement.
FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level	The proposed requirement is comparable to approved TOP-001-1, Requirement R3. That VSL is binary and the proposed VSL is also binary. Thus, the VSL in the proposed standard does not lower the level of compliance currently required by setting VSLs that are less punitive than those already proposed.

<p>of Compliance</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>Guideline 2a: N/A</p> <p>Guideline 2b: The proposed VSL does 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 VSL uses the same terminology as used in the associated 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 is based on a single violation and not cumulative violations.</p>