

## Violation Risk Factor and Violation Severity Level Assignments

This document provides the drafting team's justification for assignment of violation risk factors (VRFs) and violation severity levels (VSLs) for each requirement in

### COM-001-2 — Telecommunications

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.

### Justification for Assignment of Violation Risk Factors in COM-001-2

The SDT applied the following NERC criteria when proposing VRFs for the requirements in COM-001-2:

#### ***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.

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
- 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.

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<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.

**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.

**VRF for COM-001-2:**

There are eleven requirements in COM-001-2. None of the eleven requirements were assigned a “Lower” VRF. Requirements R1-R8 were assigned a “High” VRF while the other **three** requirements were given a “Medium” VRF.

**VRF for COM-001-2, Requirements R1-R6:**

- FERC’s Guideline 2 — Consistency within a Reliability Standard. Each requirement specifies which functional entities that are required to have Interpersonal Communications capability and Alternative Interpersonal Communications capability. The VRFs for each requirement are consistent with each other and are only applied at the Requirement level.
- FERC’s Guideline 3 — Consistency among Reliability Standards. These requirements are facility requirements that provide communications capability between functional entities. There are no similar facility requirements in the standards. The approved VRF for COM-001-1.1, R1 (which proposed R1-R6 replaces) is High and therefore the proposed VRF for R1-R6 is consistent.
- FERC’s Guideline 4 — Consistency with NERC’s Definition of a VRF. Failure to have Interpersonal Communications capability and Alternative Interpersonal Communications capability could limit or prevent communication between entities and directly affect the electrical state or the capability of the bulk power system and could lead to bulk power

system instability, separation, or cascading failures. Therefore, this requirement is assigned a High VRF.

- FERC’s Guideline 5 — Treatment of Requirements that Co-mingle More Than One Objective. COM-001-2, Requirements R1-R6 contain only one objective, therefore only one VRF was assigned.

**VRF for COM-001-2, Requirement R7:**

- FERC’s Guideline 2 — Consistency within a Reliability Standard. The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.
- FERC’s Guideline 3 — Consistency among Reliability Standards. COM-001-2, Requirement R7 is an analog to Parts 3.3 and 5.3 and they have the same VRF (High).
- FERC’s Guideline 4 — Consistency with NERC’s Definition of a VRF. Failure to have Interpersonal Communications capability could limit or prevent communication between entities and directly affect the electrical state or the capability of the bulk power system and could lead to bulk power system instability, separation, or cascading failures. Therefore, this requirement was assigned a High VRF.
- FERC’s Guideline 5 — Treatment of Requirements that Co-mingle More Than One Objective. COM-001-2, Requirement R7 addresses a single objective and has a single VRF.

**VRF for COM-001-2, Requirement R8:**

- FERC’s Guideline 2 — Consistency within a Reliability Standard. The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.
- FERC’s Guideline 3 — Consistency among Reliability Standards. COM-001-2, Requirement R8 is an analog to Parts 3.4 and 5.4 and they have the same VRF (High).
- FERC’s Guideline 4 — Consistency with NERC’s Definition of a VRF. Failure to have Interpersonal Communications capability could limit or prevent communication between entities and directly affect the electrical state or the capability of the bulk power system and could lead to bulk power system instability, separation, or cascading failures. Therefore, this requirement was assigned a High VRF.
- FERC’s Guideline 5 — Treatment of Requirements that Co-mingle More Than One Objective. COM-001-2, Requirement R8 addresses a single objective and has a single VRF.

**VRF for COM-001-2, Requirement R9:**

- FERC’s Guideline 2 — Consistency within a Reliability Standard. The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.
- FERC’s Guideline 3 — Consistency among Reliability Standards. COM-001-2, Requirement R9 is a requirement for entities to test their Alternative Interpersonal Communications capability and to take restorative action should the test fail and is a replacement requirement for COM-001-1.1, R2, which has an approved VRF of Medium.

- FERC’s Guideline 4 — Consistency with NERC’s Definition of a VRF. COM-001-2, Requirement R9 is a requirement for entities to test their Alternative Interpersonal Communications capability and to take restorative action should the test fail. The act of testing in and of itself is not likely to “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...” Therefore, this requirement was assigned a Medium VRF.
- FERC’s Guideline 5 — Treatment of Requirements that Co-mingle More Than One Objective. COM-001-2, Requirement R9 addresses a single objective and has a single VRF.

**VRF for COM-001-2, Requirement R10:**

- FERC’s Guideline 2 — Consistency within a Reliability Standard. The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.
- FERC’s Guideline 3 — Consistency among Reliability Standards. COM-001-2, Requirement R10 is a new requirement that was assigned a Medium VRF. When evaluating the VRF to be assigned to this requirement, the SDT took into account that this requirement is a notification item, not an actual action that has a direct impact on the bulk power system. Therefore, the simple act of failing to notify another entity of the failure of Interpersonal Communications capability, while it may impair the entity’s ability communicate, does not, in itself, lead to bulk power system instability, separation, or cascading failures. Therefore, this requirement was assigned a Medium VRF.
- FERC’s Guideline 4 — Consistency with NERC’s Definition of a VRF. COM-001-2, Requirement R10 mandates that entities notify entities of a failure of Interpersonal Communications capability. Bulk power system instability, separation, or cascading failures are not likely to occur due to a failure to notify another entity of the failure. Therefore, this requirement was assigned a Medium VRF.
- FERC’s Guideline 5 - Treatment of Requirements that Co-mingle More Than One Objective. TOP-001-2, Requirement R10 addresses a single objective and has a single VRF.

**VRF for COM-001-2, Requirement R11:**

- FERC’s Guideline 2 — Consistency within a Reliability Standard. The requirement has no sub-requirements; only one VRF was assigned so there is no conflict.
- FERC’s Guideline 3 — Consistency among Reliability Standards. COM-001-2, Requirement R11 is a new requirement that was assigned a Medium VRF. When evaluating the VRF to be assigned to this requirement, the SDT took into account that this requirement is a consultation item, not an actual action that has a direct impact on the bulk power system. Therefore, the simple act of failing to consult with another entity on the failure of Interpersonal Communications capability and its restoration, while it may impair the entity’s

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ability communicate, does not, in itself, lead to bulk power system instability, separation, or cascading failures. Therefore, this requirement was assigned a Medium VRF.

- FERC's Guideline 4 — Consistency with NERC's Definition of a VRF. COM-001-2, Requirement R11 mandates that entities consult with other entities regarding restoration of Interpersonal Communications capability. Bulk power system instability, separation, or cascading failures are not likely to occur due to a failure to consult with another entity on restoration times. Therefore, this requirement was assigned a Medium VRF.
- FERC's Guideline 5 - Treatment of Requirements that Co-mingle More Than One Objective. TOP-001-2, Requirement R11 addresses a single objective and has a single VRF.

**Justification for Assignment of Violation Severity Levels for COM-001-2**

In developing the VSLs for the TOP standard, the SDT anticipated the evidence that would be reviewed during an audit, and developed its VSLs based on the noncompliance an auditor may find during a typical audit. The SDT based its assignment of VSLs on the following NERC criteria:

Lower	Moderate	High	Severe
<p>Missing a minor element (or a small percentage) of the required performance 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. 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. 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. 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’s VSL guidelines are presented below, followed by an analysis of whether the VSLs proposed for each requirement in TOP-xxx-x 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.



VSLs for COM-001-2 Requirements R1 through R6:

R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 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	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
<b>R1-R6.</b>	Meets NERC's VSL guidelines - Severe: The performance or product measured does not substantively meet the intent of the requirement.	The proposed requirement is a revision of COM-001-1.1, R1 and its subrequirements. Each subrequirement was separated out into a new stand-alone requirement. The VSLs for the approved subrequirements are binary and this is reflected in the proposed VSLs.	The proposed VSL does not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.	The proposed VSL uses the same terminology as used in the associated requirement, and is, therefore, consistent with the requirement.	The VSL is based on a single violation and not cumulative violations.

VSLs for COM-001-2 Requirement R7:

R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 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	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
<b>R7.</b>	Meets NERC's VSL guidelines - Severe: The performance or product measured does not substantively meet the intent of the requirement.	The most comparable VSLs for a similar requirement are for the proposed analog requirement and its parts COM-001-2, Part 3.3 and Part 5.3. This requirement specifies the two way nature of entities having Interpersonal Communications capability. In other words, if one entity is required to have Interpersonal Communications capability with another entity, then the reciprocal should also be required or the onus would be exclusively on one entity. Since Requirement 3 and	The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.	The proposed VSLs use the same terminology as used in the associated requirement, and are, therefore, consistent with the requirement.	The VSLs are based on a single violation and not cumulative violations.

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R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 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	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
		Requirement 5 are assigned binary VSLs, it appropriate for Requirement 7 to also be assigned a binary VSL.			

VSLs for COM-001-2 Requirement R8:

R#	Compliance with NERC's Revised VSL Guidelines	<p>Guideline 1</p> <p>Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>Guideline 2</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 3</p> <p>Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>Guideline 4</p> <p>Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations</p>
<b>R8.</b>	Meets NERC's VSL guidelines - Severe: The performance or product measured does not substantively meet the intent of the requirement.	The most comparable VSLs for a similar requirement are for the proposed analog requirement and its parts COM-001-2, Part 3.4 and Part 5.4. This requirement specifies the two way nature of entities having Interpersonal Communications capability. In other words, if one entity is required to have Interpersonal Communications capability with another	The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.	The proposed VSLs use the same terminology as used in the associated requirement, and are, therefore, consistent with the requirement.	The VSLs are based on a single violation and not cumulative violations.

**Justification for Assignment of Violation Risk Factors and Violation Severity Levels for Project 2006-06 – Reliability Coordination**

R#	Compliance with NERC's Revised VSL Guidelines	<p>Guideline 1</p> <p>Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>Guideline 2</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 3</p> <p>Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>Guideline 4</p> <p>Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations</p>
		<p>entity, then the reciprocal should also be required or the onus would be exclusively on one entity. Since Requirement 3 and Requirement 5 are assigned binary VSLs, it appropriate for Requirement 7 to also be assigned a binary VSL.</p>			

VSLs for COM-001-2 Requirement R9:

R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 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	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
<b>R9.</b>	Meets NERC's VSL guidelines. There is an incremental aspect to the violation and the VSLs follow the guidelines for incremental violations.	The proposed requirement is a new and there are no comparable VSLs.	The proposed VSL does not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.	The proposed VSL uses the same terminology as used in the associated requirement, and is, therefore, consistent with the requirement.	The VSL is based on a single violation and not cumulative violations.

VSLs for COM-001-2 Requirement R10:

R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 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	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
<b>R10.</b>	Meets NERC's VSL guidelines. There is an incremental aspect to the violation and the VSLs follow the guidelines for incremental violations.	The proposed requirement is new and there are no comparable VSLs.	The proposed VSL does not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.	The proposed VSL uses the same terminology as used in the associated requirement, and is, therefore, consistent with the requirement.	The VSL is based on a single violation and not cumulative violations.

VSLs for COM-001-2 Requirement R11:

R#	Compliance with NERC's VSL Guidelines	Guideline 1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	Guideline 2 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	Guideline 3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	Guideline 4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations
<b>R11.</b>	Meets NERC's VSL guidelines. This is a binary requirement and the VSL is severe.	The proposed requirement is new and there are no comparable existing VSLs.	The proposed VSL does not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.	The proposed VSL uses the same terminology as used in the associated requirement, and is, therefore, consistent with the requirement.	The VSL is based on a single violation and not cumulative violations.