

# Violation Risk Factor and Violation Severity Level Justifications

## Project 2015-08 Emergency Operations

This document provides the drafting team's justification for assignment of violation risk factors (VRFs) and violation severity levels (VSLs) for each requirement in **EOP-004-4 – Event Reporting**. 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 by the ERO Sanctions Guidelines. The Emergency Operations Standard Drafting Team applied the following NERC criteria and FERC Guidelines when proposing VRFs and VSLs for the requirements under this project:

### 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. A planning requirement that is administrative in nature.

## **FERC Guidelines for Violation Risk Factors**

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

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

- Emergency operations
- Vegetation management
- Operator personnel training
- Protection systems and their coordination
- Operating tools and backup facilities
- Reactive power and voltage control
- System modeling and data exchange
- Communication protocol and facilities
- Requirements to determine equipment ratings
- Synchronized data recorders
- Clearer criteria for operationally critical facilities
- Appropriate use of transmission loading relief.

**Guideline (2) – Consistency within a Reliability Standard**

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

**Guideline (3) – Consistency among Reliability Standards**

FERC expects the assignment of VRFs corresponding to Requirements that address similar reliability goals in different Reliability Standards would be treated comparably.

**Guideline (4) – Consistency with NERC’s Definition of the Violation Risk Factor Level**

Guideline (4) was developed to evaluate whether the assignment of a particular VRF level conforms to NERC’s definition of that risk level.

**Guideline (5) – Treatment of Requirements that Co-mingle More Than One Obligation**

Where a single Requirement co-mingles a higher risk reliability objective and a lesser risk reliability objective, the VRF assignment for such Requirements must not be watered down to reflect the lower risk level associated with the less important objective of the Reliability Standard.

**NERC Criteria for Violation Severity Levels**

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

VSLs should be based on NERC’s overarching criteria shown in the table below:

Lower VSL	Moderate VSL	High VSL	Severe VSL
The performance or product measured almost meets the full intent of the requirement.	The performance or product measured meets the majority of the intent of the requirement.	The performance or product measured does not meet the majority of the intent of the requirement, but does meet some of the intent.	The performance or product measured does not substantively meet the intent of the requirement.

## FERC Order of Violation Severity Levels

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

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

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

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

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

Do not use ambiguous terms such as “minor” and “significant” to describe noncompliant performance.

### Guideline (3) – Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement

VSLs should not expand on what is required in the requirement.

### Guideline (4) – Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations

Unless otherwise stated in the requirement, each instance of non-compliance with a requirement is a separate violation. Section 4 of the Sanction Guidelines states that assessing penalties on a per violation per day basis is the “default” for penalty calculations.

VRF Justifications for EOP-004-4, R1	
Proposed VRF	Medium
NERC VRF Discussion	R1 is a requirement in an Operations Planning time frame to have an event reporting Operating Plan. The assignment of the Lower VRF was made based on the premise that failure to have an event reporting Operating Plan would not directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures. This is mainly an administrative requirement and thus meets NERC’s criteria for a Lower VRF.
FERC VRF G1 Discussion	<b>Guideline 1- Consistency w/ Blackout Report</b>

VRF Justifications for EOP-004-4, R1	
Proposed VRF	Medium
	R1 requires the entity to have an event reporting Operating Plan that is consistent with FERC guideline G1 regarding Operating tools and backup facilities.
<b>FERC VRF G2 Discussion</b>	<b>Guideline 2- Consistency within a Reliability Standard</b> The requirement has no parts and only one VRF was assigned so there is no conflict.
<b>FERC VRF G3 Discussion</b>	<b>Guideline 3- Consistency among Reliability Standards</b> The proposed VSL uses similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.
<b>FERC VRF G4 Discussion</b>	<b>Guideline 4- Consistency with NERC Definitions of VRFs</b> Proposed VSLs are based on a single violation and not a cumulative violation methodology.
<b>FERC VRF G5 Discussion</b>	<b>Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation</b> R1 contains only one objective, which is to have an event reporting Operating Plan. Since the requirement has only one objective, only one VRF was assigned.

**VSLs for EOP-004-4, R1**

Lower	Moderate	High	Severe
<p>The Responsible Entity had an event reporting Operating Plan, but failed to include one applicable event type.</p>	<p>The Responsible Entity had an event reporting Operating Plan, but failed to include two applicable event types.</p>	<p>The Responsible Entity had an event reporting Operating Plan, but failed to include three applicable event types.</p>	<p>The Responsible Entity had an event reporting Operating Plan, but failed to include four or more applicable event types.</p> <p>OR</p> <p>The Responsible Entity failed to have an event reporting Operating Plan.</p>

**VRF Justifications for EOP-008-2, R1**

<p><b>FERC VSL G1</b> Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The Requirements of EOP-004-4 deal with having an event operating plan Operating Plan and mirrors the Requirements of EOP-004-3 with some minor edits. The VSL's for R1 were slightly revised to add "event reporting." The VSL's for this requirement meet the current level of compliance.</p>
<p><b>FERC VSL G2</b> 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>Guideline 2a: The VSL assignment is for R1 is not binary.</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><b>FERC VSL G3</b> Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>The proposed VSL uses similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.</p>

**VRF Justifications for EOP-008-2, R1**

<p><b>FERC VSL G4</b> Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations</p>	<p>Proposed VSLs are based on a single violation and not a cumulative violation methodology.</p>
<p><b>FERC VSL G5</b> Requirements where a single lapse in protection can compromise computer network security, i.e., the 'weakest link' characteristic, should apply binary VSLs</p>	<p>Non CIP</p>
<p><b>FERC VSL G6</b> VSLs for cyber security requirements containing interdependent tasks of documentation and implementation should account for their interdependence</p>	<p>Non CIP</p>

VRF Justifications for EOP-004-4, R2	
Proposed VRF	Medium
NERC VRF Discussion	R2 is a requirement in Operations Assessment time frame that requires entities to report events per their event reporting Operating Plan. 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.
FERC VRF G1 Discussion	<b>Guideline 1- Consistency w/ Blackout Report</b> R2 requires the entity to report events per their event reporting Operating Plan. A violation of this requirement has been assigned a Medium VRF, consistent with FERC guideline G1.
FERC VRF G2 Discussion	<b>Guideline 2- Consistency within a Reliability Standard</b> The requirement has no parts and only one VRF was assigned, so there is no conflict.
FERC VRF G3 Discussion	<b>Guideline 3- Consistency among Reliability Standards</b> Requirement R2 uses similar language from EOP-004-3, Requirement R2, and the VRF remains unchanged from earlier versions.
FERC VRF G4 Discussion	<b>Guideline 4- Consistency with NERC Definitions of VRFs</b> Failure to report events per the Operating Plan would not be expected to have an adverse impact on the bulk power system, or the ability to effectively monitor and control the bulk electric system.
FERC VRF G5 Discussion	<b>Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation</b> R2 contains only one objective and only one VRF was assigned.

VSLs for EOP-004-4, R2

Lower	Moderate	High	Severe
<p>The Responsible Entity submitted an event report (e.g., written or verbal) to all required recipients more than 24 hours but less than or equal to 36 hours after recognition of meeting an event threshold for reporting.</p> <p>OR</p> <p>The Responsible Entity failed to submit an event report (e.g., written or verbal) to one entity identified in its event reporting Operating Plan within 24 hours or by the end of the next business day, as applicable..</p>	<p>The Responsible Entity submitted an event report (e.g., written or verbal) to all required recipients more than 36 hours but less than or equal to 48 hours after recognition of meeting an event threshold for reporting.</p> <p>OR</p> <p>The Responsible Entity failed to submit an event report (e.g., written or verbal) to two entities identified in its event reporting Operating Plan within 24 hours or by the end of the next business day, as applicable..</p>	<p>The Responsible Entity submitted an event report (e.g., written or verbal) to all required recipients more than 48 hours but less than or equal to 60 hours after recognition of meeting an event threshold for reporting.</p> <p>OR</p> <p>The Responsible Entity failed to submit an event report (e.g., written or verbal) to three entities identified in its event reporting Operating Plan within 24 hours or by the end of the next business day, as applicable..</p>	<p>The Responsible Entity submitted an event report (e.g., written or verbal) to all required recipients more than 60 hours after recognition of meeting an event threshold for reporting.</p> <p>OR</p> <p>The Responsible Entity failed to submit an event report (e.g., written or verbal) to four or more entities identified in its event reporting Operating Plan within 24 hours or by the end of the next business day, as applicable..</p>

VSL Justifications for EOP-004-4, R2

<p><b>FERC VSL G1</b> Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The Requirements of EOP-004-4 deal with having an event reporting Operating Plan and reporting events, and Requirement 2 language of EOP-004-4 is only slightly changed from EOP-004-3. The VSL's for this requirement meet the current level of compliance.</p>
<p><b>FERC VSL G2</b> 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>Guideline 2a: The VSL assignment is for R2 is not binary.</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><b>FERC VSL G3</b> Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>The proposed VSL uses similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.</p>

**VSL Justifications for EOP-004-4, R2**

<p><b>FERC VSL G4</b> Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations</p>	<p>Proposed VSLs are based on a single violation and not a cumulative violation methodology.</p>
<p><b>FERC VSL G5</b> Requirements where a single lapse in protection can compromise computer network security, i.e., the 'weakest link' characteristic, should apply binary VSLs</p>	<p>Non CIP</p>
<p><b>FERC VSL G6</b> VSLs for cyber security requirements containing interdependent tasks of documentation and implementation should account for their interdependence</p>	<p>Non CIP</p>