

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-008-2 – Loss of Control Center Functionality**. 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-008-2, R1	
Proposed VRF	Medium
NERC VRF Discussion	R1 is a requirement in an Operations Planning time to have an Operating Plan for backup facilities. The assignment of the Medium VRF was made based on the premise that failure to have an Operating Plan for backup functionality, by itself, would not directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures.
FERC VRF G1 Discussion	Guideline 1- Consistency w/ Blackout Report

VRF Justifications for EOP-008-2, R1	
Proposed VRF	Medium
	R1 requires the entity to have an Operating Plan for backup functionality that is consistent with FERC guideline G1 regarding Operating tools and backup facilities.
FERC VRF G2 Discussion	<p>Guideline 2- Consistency within a Reliability Standard</p> <p>The requirement has parts that are of equal importance; only one VRF was assigned so there is no conflict.</p>
FERC VRF G3 Discussion	<p>Guideline 3- Consistency among Reliability Standards</p> <p>There is a similar requirement (Requirement R1) in EOP-005-2 that is assigned a High VRF. The requirements are viewed as similar since they both refer to the creation of a plan: EOP-005-2 for a restoration plan and EOP-008-2 for a backup plan. The VRF assigned to EOP-008-1, Requirement R1 is lower than EOP-005-2, Requirement R1. The SDT recognizes that the VRF for EOP-008-1, Requirement R1 is lower than the VRF for the similar requirement in EOP-005-2 which is assigned a High VRF, however the SDT and stakeholders support the Medium VRF based on NERC's criteria for VRFs. The assignment of the Medium VRF was made based on the premise that failure to have an Operating Plan for backup functionality, by itself, would not directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures. For a requirement to be assigned a "High" VRF there should be the expectation that failure to meet the required performance "will" result in instability, separation, or cascading failures. This is not the case when an applicable entity fails to create an Operating Plan for backup functionality. While the SDT agrees that, under some circumstances, it is possible that a failure to have an Operating Plan for backup functionality may put the applicable entity in a position where it is not as prepared as it should be to address the potential situation, the failure to have an Operating Plan for backup functionality would not, by itself, result in instability, separation, or cascading failures. If the applicable entity failed to have an Operating Plan for backup functionality, it would still be expected to handle the situation if it occurred.</p>
FERC VRF G4 Discussion	<p>Guideline 4- Consistency with NERC Definitions of VRFs</p> <p>Failure to have an Operating Plan for backup functionality could directly affect the electrical state or the capability of the bulk power system, and could affect the applicable entity's ability to effectively monitor and control the bulk power system. However, violation of this requirement is unlikely to lead to bulk</p>

VRF Justifications for EOP-008-2, R1	
Proposed VRF	Medium
	power system instability, separation, or cascading failures. The applicable entities are always responsible for maintaining the reliability of the bulk power system regardless of the situation. Thus, this requirement meets NERC's criteria for a Medium VRF. Failure to have an Operating Plan for backup functionality will not, by itself, lead to instability, separation, or cascading failures.
FERC VRF G5 Discussion Guideline 5- Treatment of	Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation R1 contains only one objective which is to have an Operating Plan. Since the requirement has only one objective, only one VRF was assigned.

VSLs for EOP-008-2, R1			
Lower	Moderate	High	Severe
The responsible entity had a current Operating Plan for backup functionality, but the plan was missing one of the requirement's six parts (1.1 through 1.6).	The responsible entity had a current Operating Plan for backup functionality, but the plan was missing two of the requirement's six parts (1.1 through 1.6).	The responsible entity had a current Operating Plan for backup functionality, but the plan was missing three of the requirement's six parts (1.1 through 1.6).	The responsible entity had a current Operating Plan for backup functionality, but the plan was missing four or more of the requirement's six parts (1.1 through 1.6) OR The responsible entity did not have a current Operating Plan for backup functionality.

VRF Justifications for EOP-008-2, R2

<p>FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The Requirements of EOP-008-2 deal with having an Operating Plan to address the loss of control center functionality and mirrors the Requirements of EOP-008-1 with some minor edits. The VSL's for R1 were revised slightly by replacing "Part" with "part". The VSL's for this requirement meet the current 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>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>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 associated requirement, and is therefore consistent with the requirement.</p>

VRF Justifications for EOP-008-2, R2

<p>FERC VSL G4 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>FERC VSL G5 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>FERC VSL G6 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-008-2, R2

Proposed VRF	Lower
NERC VRF Discussion	R2 is a requirement in an Operations Planning time frame that requires entities to shall have a copy of its current Operating Plan for backup functionality available at its primary control center and at the location providing backup functionality. This is 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.
FERC VRF G1 Discussion	Guideline 1- Consistency w/ Blackout Report R1 requires the entity to have the Operating Plan for backup functionality at its primary and backup control centers. This is consistent with FERC guideline G1 regarding operating tools and backup facilities, however this requirement is administrative in nature.
FERC VRF G2 Discussion	Guideline 2- Consistency within a Reliability Standard The requirement has no parts and only one VRF was assigned so there is no conflict.
FERC VRF G3 Discussion	Guideline 3- Consistency among Reliability Standards Requirement R2 is unchanged from EOP-008-1, Requirement R2 and the VRF remains as Lower.
FERC VRF G4 Discussion	Guideline 4- Consistency with NERC Definitions of VRFs Failure to have a copy of the Operating Plan for backup functionality at each of its control locations should not have an adverse impact on the bulk power system because operations at the different locations should be essentially identical. This is mainly an administrative requirement and thus meets NERC's criteria for a Lower VRF.
FERC VRF G5 Discussion	Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation R2 contains only one objective and only one VRF was assigned.

VSLs for EOP-008-2, R2

Lower	Moderate	High	Severe
N/A	The responsible entity did not have a copy of its current Operating Plan for backup functionality available in at least one of its control locations.	N/A	The responsible entity did not have a copy of its current Operating Plan for backup functionality at any of its locations.

VSL Justifications for EOP-008-2, R2

<p>FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The Requirements of EOP-008-2 deal with having an Operating Plan to address the loss of control center functionality and mirrors the Requirements of EOP-008-1. The VSL's for this requirement meet the current 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>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>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 associated requirement, and is therefore consistent with the requirement.</p>

VSL Justifications for EOP-008-2, R2

<p>FERC VSL G4 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>FERC VSL G5 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>FERC VSL G6 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-008-2, R3

Proposed VRF	High
NERC VRF Discussion	R3 is a requirement in an Operations Planning time frame that, if violated, could directly prevent restoration to normal operations, 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.
FERC VRF G1 Discussion	<p>Guideline 1- Consistency w/ Blackout Report</p> <p>R3 requires the Reliability Coordinator to have a backup control center facility that provides the functionality required for maintaining compliance with all Reliability Standards that depend on primary control center functionality. A high VRF was assigned consistent with FERC guideline G1 regarding operating tools and backup facilities.</p>
FERC VRF G2 Discussion	<p>Guideline 2- Consistency within a Reliability Standard</p> <p>The requirement has no parts and only one VRF was assigned so there is no conflict.</p>
FERC VRF G3 Discussion	<p>Guideline 3- Consistency among Reliability Standards</p> <p>Requirement R3 is unchanged from EOP-008-1, Requirement R3 and the VRF remains as High.</p>
FERC VRF G4 Discussion	<p>Guideline 4- Consistency with NERC Definitions of VRFs</p> <p>Failure to have a backup control center facility (provided through its own dedicated backup facility or at another entity’s control center) will impact the situational awareness of the Reliability Coordinator, and thus could affect the Reliability Coordinator’s ability to effectively monitor and control the bulk power system, however violation of this requirement is unlikely to lead to bulk power system instability, separation or cascading failures. The Reliability Coordinator is required to maintain control and awareness of the bulk power system at all times.</p>
FERC VRF G5 Discussion	<p>Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation</p> <p>R3 contains only one objective and only one VRF was assigned.</p>

VSLs for EOP-008-2, R3

Lower	Moderate	High	Severe
N/A	N/A	N/A	<p>The Reliability Coordinator does not have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center staffed with certified Reliability Coordinator operators when control has been transferred to the backup facility) that provides the functionality required for maintaining compliance with all Reliability Standards that depend on <u>are applicable to the</u> primary control center functionality.</p>

VSL Justifications for EOP-008-2, R3

<p>FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The Requirements of EOP-008-2 deal with having an Operating Plan to address the loss of control center functionality and mirrors the Requirements of EOP-008-1. The VSL's for this requirement meet the current 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>Guideline 2a: The VSL assignment is for R3 is binary and is at the Severe level. The requirement specifies that a Reliability Coordinator must have a backup control center facility that provides the functionality required for maintaining compliance with all Reliability Standards that depend on primary control center functionality. The Reliability Coordinator will either have a backup facility that meets the requirement or they will not. Therefore, a binary VSL of Severe is justified.</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 similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.</p>

VSL Justifications for EOP-008-2, R3

<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 proposed VSLs are based on a single violation and not a cumulative violation methodology.</p>
<p>FERC VSL G5 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>FERC VSL G6 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-008-2, R4

Proposed VRF	High
NERC VRF Discussion	R4 is a requirement in an Operations Planning time frame that, if violated, could directly prevent restoration to normal operations, 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.
FERC VRF G1 Discussion	<p>Guideline 1- Consistency w/ Blackout Report</p> <p>R4 requires the Balancing Authority or Transmission Operator to have a backup control center facility that provides the functionality required for maintaining compliance with all Reliability Standards that depend on primary control center functionality. A high VRF was assigned consistent with FERC guideline G1 regarding operating tools and backup facilities.</p>
FERC VRF G2 Discussion	<p>Guideline 2- Consistency within a Reliability Standard</p> <p>The requirement has no parts and only one VRF was assigned so there is no conflict.</p>
FERC VRF G3 Discussion	<p>Guideline 3- Consistency among Reliability Standards</p> <p>Requirement R4 is unchanged from EOP-008-1, Requirement R4 and the VRF remains as High.</p>
FERC VRF G4 Discussion	<p>Guideline 4- Consistency with NERC Definitions of VRFs</p> <p>Failure to have backup functionality (provided either through a facility or contracted services) will impact the situational awareness of the Transmission Operator or Balancing Authority, and thus could affect the Transmission Operator’s or Balancing Authority’s ability to effectively monitor and control the bulk power system, however violation of this requirement is unlikely to lead to bulk power system instability, separation or cascading failures. The Transmission Operator or Balancing Authority is required to maintain control and awareness of the bulk power system at all times.</p>
FERC VRF G5 Discussion	<p>Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation</p> <p>R4 contains only one objective and only one VRF was assigned.</p>

VSLs for EOP-008-2, R4

Lower	Moderate	High	Severe
N/A	N/A	N/A	<p>The responsible entity does not have backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) that includes monitoring, control, logging, and alarming sufficient for maintaining compliance with all Reliability Standards that depend on <u>are applicable to</u> a Balancing Authority's and Transmission Operator's primary control center functionality <u>respectively</u>.</p>

VSL Justifications for EOP-008-2, 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 Requirements of EOP-008-2 deal with having an Operating Plan to address the loss of control center functionality and mirrors the Requirements of EOP-008-1. The VSL's for this requirement meet the current 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>Guideline 2a: The VSL assignment is for R4 is binary and is at the Severe level. The requirement specifies that a Balancing Authority or Transmission Operator must have a backup control center facility that provides the functionality required for maintaining compliance with all Reliability Standards that depend on primary control center functionality. The Balancing Authority or Transmission Operator will either have a backup facility that meets the requirement or they will not. Therefore, a binary VSL of Severe is justified.</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 similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.</p>

VSL Justifications for EOP-008-2, R4

<p>FERC VSL G4 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>FERC VSL G5 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>FERC VSL G6 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-008-2, R5

Proposed VRF	Medium
NERC VRF Discussion	R1 is a requirement in an Operations Planning time to update an Operating Plan for backup facilities annually. The assignment of the Medium VRF was made based on the premise that failure to annually update an Operating Plan for backup functionality, by itself, would not directly cause or contribute to bulk power system instability, separation, or a cascading sequence of failures.
FERC VRF G1 Discussion	<p>Guideline 1- Consistency w/ Blackout Report</p> <p>R5 requires the annual review of the Operating Plan for back up functionality that is consistent with FERC guideline G1 regarding operating tools and backup functionality.</p>
FERC VRF G2 Discussion	<p>Guideline 2- Consistency within a Reliability Standard</p> <p>The requirement has one part that is related to the main requirement regarding updating the Operating Plan and only one VRF was assigned so there is no conflict.</p>
FERC VRF G3 Discussion	<p>Guideline 3- Consistency among Reliability Standards</p> <p>Requirement R5 is unchanged from EOP-008-1, Requirement R5 and the VRF remains as Medium.</p>
FERC VRF G4 Discussion	<p>Guideline 4- Consistency with NERC Definitions of VRFs</p> <p>Failure to update an Operating Plan for backup functionality could directly affect the electrical state or the capability of the bulk power system, and could affect the applicable entity’s ability to effectively monitor and control the bulk power system. However, violation of this requirement is unlikely to lead to bulk power system instability, separation, or cascading failures. The applicable entities are always responsible for maintaining the reliability of the bulk power system regardless of the situation. Thus, this requirement meets NERC’s criteria for a Medium VRF. Failure to update an Operating Plan for backup functionality will not, by itself, lead to instability, separation, or cascading failures.</p>
FERC VRF G5 Discussion	<p>Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation</p> <p>R5 contains only one objective and only one VRF was assigned.</p>

VSLs for EOP-008-2, R5

Lower	Moderate	High	Severe
<p>The responsible entity did not update and approve its Operating Plan for backup functionality for more than 60 calendar days and less than or equal to 70 calendar days after a change to any part of the Operating Plan described in Requirement R1.</p>	<p>The responsible entity did not update and approve its Operating Plan for backup functionality for more than 70 calendar days and less than or equal to 80 calendar days after a change to any part of the Operating Plan described in Requirement R1.</p>	<p>The responsible entity did not update and approve its Operating Plan for backup functionality for more than 80 calendar days and less than or equal to 90 calendar days after a change to any part of the Operating Plan described in Requirement R1.</p>	<p>The responsible entity did not have evidence that its Operating Plan for backup functionality was <u>annually</u> reviewed and approved at least once every 15 calendar months.</p> <p>OR</p> <p>The responsible entity did not update and approve its Operating Plan for backup functionality for more than 90 calendar days after a change to any part of the Operating Plan described in Requirement R1.</p>

VSL Justifications for EOP-008-2, R5

<p>FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The Requirements of EOP-008-2 deal with having an Operating Plan to address the loss of control center functionality and mirrors the Requirements of EOP-008-1. The VSL's for this requirement meet the current 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>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>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 associated requirement, and is therefore consistent with the requirement.</p>

VSL Justifications for EOP-008-2, R5

<p>FERC VSL G4 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>FERC VSL G5 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>FERC VSL G6 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-008-2, R6

Proposed VRF	Medium
NERC VRF Discussion	R6 is a requirement in an Operations Planning time frame that, if violated, could prevent restoration to normal operations, 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.
FERC VRF G1 Discussion	<p>Guideline 1- Consistency w/ Blackout Report</p> <p>R6 requires the independence between the primary and back up control centers. A violation of this requirement is assigned a “Medium” VRF because, if the applicable entity did have a dependence between their primary and backup capabilities it is not clear that this could directly lead, without any other violations of any other requirements, to instability, separation, or cascading failures. This is consistent with FERC guideline G1 regarding operating tools and backup functionality.</p>
FERC VRF G2 Discussion	<p>Guideline 2- Consistency within a Reliability Standard</p> <p>The requirement has no parts and only one VRF was assigned so there is no conflict.</p>
FERC VRF G3 Discussion	<p>Guideline 3- Consistency among Reliability Standards</p> <p>Requirement R6 is unchanged from EOP-008-1, Requirement R46 and the VRF remains as Medium.</p>
FERC VRF G4 Discussion	<p>Guideline 4- Consistency with NERC Definitions of VRFs</p> <p>Requirement R6 addresses the situation applicable entities primary and backup capabilities can’t depend on each other. A violation of this requirement is assigned a “Medium” VRF because, if the applicable entity did have a dependence between their primary and backup capabilities it is not clear that this could directly lead, without any other violations of any other requirements, to instability, separation, or cascading failures.</p>
FERC VRF G5 Discussion	<p>Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation</p> <p>R6 contains only one objective and only one VRF was assigned.</p>

VSLs for EOP-008-2, R6

Lower	Moderate	High	Severe
N/A	N/A	N/A	The responsible entity has primary and backup functionality that do depend on each other for the control center functionality required to maintain compliance with Reliability Standards.

VSL Justifications for EOP-008-2, 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 Requirements of EOP-008-2 deal with having an Operating Plan to address the loss of control center functionality and mirrors the Requirements of EOP-008-1. The VSL's for this requirement meet the current 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>Guideline 2a: The VSL assignment is for R6 is binary and is at the Severe level. The requirement specifies that a Reliability Coordinator, Balancing Authority, or Transmission Operator shall have primary and backup functionality that do not depend on each other for the control center functionality required to maintain compliance with Reliability Standards. The Reliability Coordinator, Balancing Authority, or Transmission Operator will either have a backup facility that meets the requirement or they will not. Therefore, a binary VSL of Severe is justified.</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 similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.</p>

VSL Justifications for EOP-008-2, R6

<p>FERC VSL G4 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>FERC VSL G5 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>FERC VSL G6 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-008-2, R7

Proposed VRF	Medium
NERC VRF Discussion	R7 is a requirement in an Operations Planning time frame that, if violated, could directly prevent restoration to normal operations, 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.
FERC VRF G1 Discussion	<p>Guideline 1- Consistency w/ Blackout Report</p> <p>R7 requires entities to conduct and document the results of an annual test of its backup facility. Violation of this requirement is not likely to cause bulk electric system instability, separation, or a cascading sequence of failures and is therefore assigned a Medium VRF consistent with FERC guideline G1 regarding operating tools and backup facilities.</p>
FERC VRF G2 Discussion	<p>Guideline 2- Consistency within a Reliability Standard</p> <p>The requirement has parts that are of equal importance and only one VRF was assigned so there is no conflict.</p>
FERC VRF G3 Discussion	<p>Guideline 3- Consistency among Reliability Standards</p> <p>Requirement R7 is unchanged from EOP-008-1, Requirement R7 and the VRF remains as Medium.</p>
FERC VRF G4 Discussion	<p>Guideline 4- Consistency with NERC Definitions of VRFs</p> <p>EOP-008-1, Requirement R7 mandates testing of an applicable entity’s Operating Plan for backup capability. A violation of this requirement is assigned a “Medium” VRF because, if the applicable entity did not test their Operating Plan for backup capability it is not clear that this could directly lead, without any other violations of any other requirements, to instability, separation, or cascading failures.</p>
FERC VRF G5 Discussion	<p>Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation</p> <p>R7 contains only one objective and only one VRF was assigned.</p>

VSLs for EOP-008-2, R7

Lower	Moderate	High	Severe
<p>The responsible entity conducted a-an annual test of its Operating Plan for backup functionality at least once every 15 calendar months, but it did not document the results.</p> <p>OR</p> <p>The responsible entity conducted a-an annual test of its Operating Plan for backup functionality, but the test was for less than two continuous hours, but more than or equal to 1.5 continuous hours.</p>	<p>The responsible entity conducted a-an annual test of its Operating Plan for backup functionality at least once every 15 calendar months, but the test was for less than 1.5 continuous hours, but more than or equal to 1 continuous hour.</p>	<p>The responsible entity conducted a-an annual test of its Operating Plan for backup functionality at least once every 15 calendar months, but the test did not assess the transition time between the simulated loss of its primary control center and the time to fully implement the backup functionality</p> <p>OR</p> <p>The responsible entity conducted a-an annual test of its Operating Plan for backup functionality at least once every 15 calendar months, but the test was for less than 1 continuous hour but more than or equal to 0.5 continuous hours.</p>	<p>The responsible entity did not conduct a-an annual test of its Operating Plan for backup functionality at least once every 15 calendar months.</p> <p>OR</p> <p>The responsible entity conducted a-an annual test of its Operating Plan for backup functionality at least once every 15 calendar months, but the test was for less than 0.5 continuous hours.</p>

VSL Justifications for EOP-008-2, R7

<p>FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The Requirements of EOP-008-2 deal with having an Operating Plan to address the loss of control center functionality and mirrors the Requirements of EOP-008-1. The VSL's for this requirement meet the current 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>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>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 associated requirement, and is therefore consistent with the requirement.</p>

VSL Justifications for EOP-008-2, R7

<p>FERC VSL G4 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>FERC VSL G5 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>FERC VSL G6 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-008-2, R8

Proposed VRF	Medium
NERC VRF Discussion	R8 is a requirement in an Operations Planning time frame that, if violated, could directly prevent restoration to normal operations, 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.
FERC VRF G1 Discussion	<p>Guideline 1- Consistency w/ Blackout Report</p> <p>R8 requires the entity that has experienced a loss of its primary or backup functionality and that anticipates that the loss of primary or backup functionality will last for more than six calendar months to provide a plan to its Regional Entity showing how it will re-establish primary or backup functionality. If an entity fails to provide a plan to the Regional Entity, this violation in and of itself is not likely to cause or contribute to bulk electric system instability, separation, or a cascading sequence of failures. This is consistent with FERC guideline G1 regarding operating tools and backup facilities.</p>
FERC VRF G2 Discussion	<p>Guideline 2- Consistency within a Reliability Standard</p> <p>The requirement has no parts and only one VRF was assigned so there is no conflict.</p>
FERC VRF G3 Discussion	<p>Guideline 3- Consistency among Reliability Standards</p> <p>Requirement R8 is unchanged from EOP-008-1, Requirement R8 and the VRF remains as Medium.</p>
FERC VRF G4 Discussion	<p>Guideline 4- Consistency with NERC Definitions of VRFs</p> <p>Requirement R8 mandates that entities provide a plan for re-establishing backup capabilities following a catastrophic failure. A failure to provide this plan does not affect the applicable entity's ability to effectively monitor and control the bulk power system. Violation of this requirement is unlikely, by itself, to lead to bulk power system instability, separation, or cascading failures, thus the assignment of a "Medium" VRF.</p>
FERC VRF G5 Discussion	<p>Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation</p> <p>R8 contains only one objective and only one VRF was assigned.</p>

VSLs for EOP-008-2, R8

Lower	Moderate	High	Severe
<p>The responsible entity experienced a loss of its primary or backup functionality and anticipated that the loss of primary or backup functionality would last for more than six calendar months and provided a plan to its Regional Entity showing how it will re-establish primary or backup functionality, but the plan was submitted more than six calendar months, but less than or equal to seven calendar months after the date when the functionality was lost.</p>	<p>The responsible entity experienced a loss of its primary or backup functionality and anticipated that the loss of primary or backup functionality would last for more than six calendar months provided a plan to its Regional Entity showing how it will re-establish primary or backup functionality, but the plan was submitted in more than seven calendar months, but less than or equal to eight calendar months after the date when the functionality was lost.</p>	<p>The responsible entity experienced a loss of its primary or backup functionality and anticipated that the loss of primary or backup functionality would last for more than six calendar months provided a plan to its Regional Entity showing how it will re-establish primary or backup functionality but the plan was submitted in more than eight calendar months but less than or equal to nine calendar months after the date when the functionality was lost.</p>	<p>The responsible entity experienced a loss of its primary or backup functionality and anticipated that the loss of primary or backup functionality would last for more than six calendar months, but did not submit a plan to its Regional Entity showing how it will re-establish primary or backup functionality for more than nine calendar months after the date when the functionality was lost.</p>

VSL Justifications for EOP-008-2, R8

<p>FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p>	<p>The Requirements of EOP-008-2 deal with having an Operating Plan to address the loss of control center functionality and mirrors the Requirements of EOP-008-1. The VSL's for this requirement meet the current 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>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>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 associated requirement, and is therefore consistent with the requirement.</p>

VSL Justifications for EOP-008-2, R8

<p>FERC VSL G4 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>FERC VSL G5 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>FERC VSL G6 VSLs for cyber security requirements containing interdependent tasks of documentation and implementation should account for their interdependence</p>	<p>Non CIP</p>