

Violation Risk Factor and Violation Severity Level Justifications

MOD-031-1 - Demand and Energy Data

This document provides the Standard Drafting Team's (SDT) justification for assignment of violation risk factors (VRFs) and violation severity levels (VSLs) for each requirement in MOD-031-1 — Demand and Energy Data. Each requirement is assigned a VRF and a VSL. These elements support the determination of an initial value range for the Base Penalty Amount regarding violations of requirements in FERC-approved Reliability Standards, as defined in the Electric Reliability Organizations (ERO) Sanction Guidelines. The SDT applied the following NERC criteria and FERC Guidelines when proposing VRFs and VSLs for the requirements under this project.

NERC Criteria - Violation Risk Factors High Risk Requirement

A requirement that, if violated, could directly cause or contribute to Bulk Electric System instability, separation, or a cascading sequence of failures, or could place the Bulk Electric System at an unacceptable risk of instability, separation, or cascading failures; or, a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to Bulk Electric System instability, separation, or a cascading sequence of failures, or could place the Bulk Electric System at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

Medium Risk Requirement

A requirement that, if violated, could directly affect the electrical state or the capability of the Bulk Electric System, or the ability to effectively monitor and control the Bulk Electric System. However, violation of a medium risk requirement is unlikely to lead to Bulk Electric System instability, separation, or cascading failures; or, a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly and adversely affect the electrical state or capability of the Bulk Electric System, or the ability to effectively monitor, control, or restore the Bulk Electric System. However, violation of a medium risk requirement is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, nor to hinder restoration to a normal condition.



Lower Risk Requirement

A requirement that is administrative in nature and a requirement that, if violated, would not be expected to adversely affect the electrical state or capability of the Bulk Electric System, or the ability to effectively monitor and control the Bulk Electric System; or, a requirement that is administrative in nature and a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to adversely affect the electrical state or capability of the Bulk Electric System, or the ability to effectively monitor, control, or restore the Bulk Electric System.

FERC Violation Risk Factor Guidelines

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:

- 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.

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.

NERC Criteria - Violation Severity Levels

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



Violation severity levels should be based on 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

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

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

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

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

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

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

Guideline 3 – Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement VSLs should not expand on what is required in the requirement.

Guideline 4 – Violation Severity Level Assignment Should Be Based on a Single Violation, Not on a Cumulative Number of Violations

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



VRF Justification – MOD-031-1 Requirement R1	
Proposed VRF	Medium
NERC VRF Discussion	Consistent with NERC's VRF Guidelines.
	A VRF of medium is consistent with the NERC VRF definition. Requirement R1 prescribes data that may be collected for analysis.
	Additionally, the Medium VRF is consistent with the prior versions of this Requirement in the currently effective version of the standard.
FERC VRF G1 Discussion	Guideline 1 – Consistency with Blackout Report:
	It is difficult to argue that a failure to collect the data will directly lead to instability, separation, or Cascading. NERC staff believes that the Medium VRF assignment was appropriate.
FERC VRF G2 Discussion	Guideline 2 – Consistency within a Reliability Standard:
	All of the parts within Requirement R1 are consistent with one another and considered a medium VRF.
FERC VRF G3 Discussion	Guideline 3 – Consistency among Reliability Standards:
	The Medium VRF is consistent with the prior version of this Requirement in the currently effective version of the standard.
FERC VRF G4 Discussion	Guideline 4 – Consistency with NERC Definitions of VRFs:
	The VRF is consistent with the NERC definition. A violation of this requirement is unlikely to lead to Bulk Electric System (BES) instability, separation, or a cascading sequence of 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 BES.
FERC VRF G5 Discussion	Guideline 5 – Treatment of Requirements that Co-mingle More Than One Obligation:
	This VRF has one objective – to collect data.



VSL Justification – MOD-031-1 Requirement R1		
NERC VSL Guidelines	Consistent with NERC's VSL Guidelines. The Requirement is binary and therefore has one VSL.	
FERC VSL G1: Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	The current level of compliance is not lowered with the proposed VSL.	
FERC VSL G2: Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties	The proposed VSL is written to ensure uniformity and consistency in the determination of penalties. Guideline 2a: The proposed VSL is binary and therefore has on VSL, severe.	
Guideline 2a: The single VSL assignment category for "Binary" Requirements is not consistent	Guideline 2b: The proposed VSL does not use ambiguous terms, supporting uniformity and consistency in the determination of similar penalties for similar violations.	
Guideline 2b: VSL Assignments that contain ambiguous language		
FERC VSL G3:	The proposed VSL is consistent with the corresponding requirement.	



Violation Severity Level	
Assignment Should Be	
Consistent with the	
Corresponding	
Requirement	
FERC VSL G4:	The proposed VSL is not based on a cumulative number of violations.
Violation Severity Level	The proposed value based on a cumulative number of violations.
Assignment Should Be	
Based on A Single Violation,	
Not on A Cumulative	
Number of Violations	

VRF Justification – MOD-031-1 Requirement R2	
Proposed VRF	Medium
NERC VRF Discussion	Consistent with NERC's VRF Guidelines.
	A VRF of medium is consistent with the NERC VRF definition. Requirement R2 ensures that once data is collected, it is passed on to the appropriate entity.
	Additionally, the Medium VRF is consistent with the prior versions of this Requirement in the currently effective version of the standard.
FERC VRF G1 Discussion	Guideline 1 – Consistency with Blackout Report:
	It is difficult to argue that a failure to collect the data will directly lead to instability, separation, or Cascading. NERC staff believes that the Medium VRF assignment was appropriate.
FERC VRF G2 Discussion	Guideline 2 – Consistency within a Reliability Standard:



	All of the parts within Requirement R2 are consistent with one another and considered a medium VRF.
FERC VRF G3 Discussion	Guideline 3 – Consistency among Reliability Standards:
	The Medium VRF is consistent with the prior version of this Requirement in the currently effective version of the standard.
FERC VRF G4 Discussion	Guideline 4 – Consistency with NERC Definitions of VRFs:
	The VRF is consistent with the NERC definition. A violation of this requirement is unlikely to lead to Bulk Electric System (BES) instability, separation, or a cascading sequence of 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 BES.
FERC VRF G5 Discussion	Guideline 5 – Treatment of Requirements that Co-mingle More Than One Obligation:
	This Requirement has one objective – to ensure that data is collected.

VSL Justification – MOD-031-1 Requirement R2	
NERC VSL Guidelines	Consistent with NERC's VSL Guidelines. The VSL describes degrees of noncompliant performance in an
	incremental manner.
FERC VSL G1:	The current level of compliance is not lowered with the proposed VSL.
Violation Severity Level	
Assignments Should Not	
Have the Unintended	
Consequence of Lowering	
the Current Level of	
Compliance	
FERC VSL G2:	The proposed VSL is written to ensure uniformity and consistency in the determination of penalties.



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Violation Severity Level	
Assignments Should Ensure	Cuideline 2a. The proposed VCL is not binary
Uniformity and Consistency	Guideline 2a: The proposed VSL is not binary
in the Determination of	
Penalties	Guideline 2b: The proposed VSL does not use ambiguous terms, supporting uniformity and consistency in the
Guideline 2a: The single VSL	determination of similar penalties for similar violations.
assignment category for	determination of similar penalties for similar violations.
"Binary" Requirements is	
not consistent	
Guideline 2b: VSL	
Assignments that contain	
ambiguous language	
FERC VSL G3:	The proposed VSL is worded consistently with the corresponding requirement.
Violation Severity Level	The proposed value consistently with the corresponding requirement.
Assignment Should Be	
Consistent with the	
Corresponding	
Requirement	
FERC VSL G4:	The proposed VSL is not based on cumulative number of violations.
Violation Severity Level	The proposed VSE is not based on camalative number of violations.
Assignment Should Be	
Based on A Single Violation,	
Not on A Cumulative	
Number of Violations	



VRF Justification – MOD-031-1 Requirement R3	
Proposed VRF	Medium
NERC VRF Discussion	Consistent with NERC's VRF Guidelines.
	A VRF of medium is consistent with the NERC VRF definition. Requirement R3 ensures that once data is collected, it is passed on to the appropriate entity.
	Additionally, the Medium VRF is consistent with the prior versions of this Requirement in the currently effective version of the standard.
FERC VRF G1 Discussion	Guideline 1 – Consistency with Blackout Report:
	It is difficult to argue that a failure to collect the data will directly lead to instability, separation, or Cascading. NERC staff believes that the Medium VRF assignment was appropriate.
FERC VRF G2 Discussion	Guideline 2 – Consistency within a Reliability Standard:
	All of the parts within Requirement R3 are consistent with one another and considered a medium VRF.
FERC VRF G3 Discussion	Guideline 3 – Consistency among Reliability Standards:
	The Medium VRF is consistent with the prior version of this Requirement in the currently effective version of the standard.
FERC VRF G4 Discussion	Guideline 4 – Consistency with NERC Definitions of VRFs:
	The VRF is consistent with the NERC definition. A violation of this requirement is unlikely to lead to Bulk Electric System (BES) instability, separation, or a cascading sequence of 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 BES.
FERC VRF G5 Discussion	Guideline 5 – Treatment of Requirements that Co-mingle More Than One Obligation:
	This Requirement has one objective – to ensure that data is collected.



	VSL Justification – MOD-031-1 Requirement R3		
NERC VSL Guidelines	Consistent with NERC's VSL Guidelines. The VSL describes degrees of noncompliant performance in an incremental manner.		
FERC VSL G1: Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	The current level of compliance is not lowered with the proposed VSL.		
FERC VSL G2: Violation Severity Level	The proposed VSL is written to ensure uniformity and consistency in the determination of penalties.		
Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties	Guideline 2a: The proposed VSL is not binary		
Guideline 2a: The single VSL assignment category for "Binary" Requirements is not consistent Guideline 2b: VSL Assignments that contain ambiguous language	Guideline 2b: The proposed VSL does not use ambiguous terms, supporting uniformity and consistency in the determination of similar penalties for similar violations.		
FERC VSL G3: Violation Severity Level Assignment Should Be Consistent with the	The proposed VSL is worded consistently with the corresponding requirement.		



Corresponding	
Requirement	
FERC VSL G4:	The proposed VSL is not based on cumulative number of violations.
Violation Severity Level	The proposed value based on camulative number of violations.
Assignment Should Be	
Based on A Single Violation,	
Not on A Cumulative	
Number of Violations	

VRF Justification – MOD-031-1 Requirement R4	
Proposed VRF	Medium
NERC VRF Discussion	Consistent with NERC's VRF Guidelines.
	A VRF of medium is consistent with the NERC VRF definition. Requirement R4 ensures that neighboring entities have the ability to collect data.
	Additionally, the Medium VRF is consistent with the prior versions of this Requirement in the currently effective version of the standard.
FERC VRF G1 Discussion	Guideline 1 – Consistency with Blackout Report:
	It is difficult to argue that a failure to collect the data will directly lead to instability, separation, or Cascading. NERC staff believes that the Medium VRF assignment was appropriate.
FERC VRF G2 Discussion	Guideline 2 – Consistency within a Reliability Standard:
	All of the parts within Requirement R4 are consistent with one another and considered a medium VRF.
FERC VRF G3 Discussion	Guideline 3 – Consistency among Reliability Standards:
	The Medium VRF is consistent with the prior version of this Requirement in the currently effective version of the



	standard.
FERC VRF G4 Discussion	Guideline 4 – Consistency with NERC Definitions of VRFs:
	The VRF is consistent with the NERC definition. A violation of this requirement is unlikely to lead to Bulk Electric System (BES) instability, separation, or a cascading sequence of 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 BES.
FERC VRF G5 Discussion	Guideline 5 – Treatment of Requirements that Co-mingle More Than One Obligation:
	This Requirement has one objective – to ensure that data is collected.

VSL Justification – MOD-031-1 Requirement R4		
NERC VSL Guidelines	Consistent with NERC's VSL Guidelines. The VSL describes degrees of noncompliant performance in an	
	incremental manner.	
FERC VSL G1:	The current level of compliance is not lowered with the proposed VSL.	
Violation Severity Level		
Assignments Should Not		
Have the Unintended		
Consequence of Lowering		
the Current Level of		
Compliance		
FERC VSL G2:	The proposed VSL is written to ensure uniformity and consistency in the determination of penalties.	
Violation Severity Level		
Assignments Should Ensure		
Uniformity and Consistency	Guideline 2a: The proposed VSL is not binary	
in the Determination of		
Penalties		



Guideline 2a: The single VSL assignment category for "Binary" Requirements is	Guideline 2b: The proposed VSL does not use ambiguous terms, supporting uniformity and consistency in the determination of similar penalties for similar violations.
not consistent	
Guideline 2b: VSL	
Assignments that contain	
ambiguous language	
FERC VSL G3:	The proposed VSL is worded consistently with the corresponding requirement.
Violation Severity Level	
Assignment Should Be	
Consistent with the	
Corresponding	
Requirement	
FERC VSL G4:	The proposed VSL is not based on cumulative number of violations.
Violation Severity Level	
Assignment Should Be	
Based on A Single Violation,	
Not on A Cumulative	
Number of Violations	