

Justification for VRFs and VSLs in IRO-006-5 and IRO-006-EAST-1

This document provides the justification for assignment of Violation Risk Factors (VRFs) and Violation Severity Levels (VSLs), identifying how each proposed VRF and VSL meets NERC's criteria and FERC's Guidelines. NERC's criteria for setting VRFs and VSLs; FERC's five guidelines (G1–G5) for approving VRFs; and FERC's four guidelines (G1-G4) for setting VSLs are provided at the end of this document.

IRO-006-5 VRF and VSL Justifications		
R1	Proposed VRF	High
	NERC VRF Discussion	An entity in another interconnection that does not curtail as requested will leave their interconnection unbalanced, which could contribute to BES instability.
	FERC VRF G1 Discussion	The requirement is related to the use of Transmission Loading Relief, but is not related to the appropriateness of using TLR. As such, the VRF is not required to be High.
	FERC VRF G2 Discussion	This standard does not utilize sub-requirements, but instead uses parts. Additionally, the standard has only one requirement. As such, G2 does not apply.
	FERC VRF G3 Discussion	This VRF is consistent with that of IRO-001 R8, which establishes the responsibility of entities to respond to the directives of Reliability Coordinators.
	FERC VRF G4 Discussion	An entity in another interconnection that does not curtail as requested will leave their interconnection unbalanced, which could contribute to BES instability.
	FERC VRF G5 Discussion	This requirement does not co-mingle reliability objectives.
	Proposed Lower VSL	N/A
	Proposed Moderate VSL	N/A
	Proposed High VSL	N/A
	Proposed Severe VSL	The responsible entity received a request to curtail an Interchange Transaction crossing an Interconnection boundary pursuant to an Interconnection-wide transmission loading relief procedure from a Reliability Coordinator, Balancing Authority, or Transmission Operator, but the entity neither complied with the request, nor provided a valid reliability reason that it could not comply with the request.
	FERC VSL G1 Discussion	No longer applicable given significant changes in standard structure.
	FERC VSL G2 Discussion	The VSL is written as a pass/fail VSL, and it has been set at the "Severe" level, meeting guideline 2A. The VSL is written in clear and unambiguous language, meeting Guideline 2B.
	FERC VSL G3 Discussion	The VSL aligns with the language of the requirement, and does not add to nor take away from it.

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	FERC VSL G4 Discussion	The VSL is based on a single violation of the requirement.
IRO-006-EAST-1 VSL and VRF Justifications		
R1	Proposed VRF	High
	NERC VRF Discussion	An entity that, when responding to an IROL, only implements the TLR procedure alone and does not take other action prior to or concurrently with the TLR procedure has placed the bulk electric system at an unacceptable risk of instability, separation, or cascading failures.
	FERC VRF G1 Discussion	The requirement is related to the use of Transmission Loading Relief, and is related to the appropriateness of using TLR. As such, the VRF is required to be High.
	FERC VRF G2 Discussion	This standard does not utilize sub-requirements, but instead uses parts. As such, G2 does not apply. However, the VRFs for this requirement are consistent with others in the standard with regard to relative risk.
	FERC VRF G3 Discussion	The requirement is consistent with IRO-009 R4. As this requirement addresses the manner in which entities respond to actual IROL exceedances, it is appropriate that this requirement share that same VRF of High.
	FERC VRF G4 Discussion	An entity that, when responding to an IROL, only implements the TLR procedure alone and does not take other action prior to or concurrently with the TLR procedure has placed the bulk electric system at an unacceptable risk of instability, separation, or cascading failures.
	FERC VRF G5 Discussion	This requirement does not co-mingle reliability objectives.
	Proposed Lower VSL	N/A
	Proposed Moderate VSL	N/A
	Proposed High VSL	N/A
	Proposed Severe VSL	When acting or instructing others to act to mitigate the magnitude and duration of the instance of exceeding an IROL within that IROL's T_v , the Reliability Coordinator did not initiate one or more of the actions listed under R1 prior to or in conjunction with the initiation of the Eastern Interconnection TLR procedure (or continuing management of this procedure if already initiated).
	FERC VSL G1 Discussion	No longer applicable given significant changes in standard structure.
	FERC VSL G2 Discussion	The VSL is written as a pass/fail VSL, and it has been set at the "Severe" level, meeting guideline 2A. The VSL is written in clear and unambiguous language, meeting Guideline 2B.
	FERC VSL G3 Discussion	The VSL aligns with the language of the requirement, and does not add to nor take away from it.
	FERC VSL G4 Discussion	The VSL is based on a single violation of the requirement.

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R2	Proposed VRF	Medium
	NERC VRF Discussion	An entity that does not continually identify TLR level and actions to take on at least an hourly basis may have a negative effect on the reliability of the BES by reducing coordination, but that action alone is unlikely to lead to bulk electric system instability, separation, or cascading failures.
	FERC VRF G1 Discussion	The requirement is related to the use of Transmission Loading Relief, but is not related to the appropriateness of using TLR. As such, the VRF is not required to be High.
	FERC VRF G2 Discussion	This standard does not utilize sub-requirements, but instead uses parts. As such, G2 does not apply. However, the VRFs for this requirement are consistent with others in the standard with regard to relative risk.
	FERC VRF G3 Discussion	IRO-005-2 R7 indicates that the dissemination of information from the RC should be considered as having a "High" risk factor. However, IRO-005 R7 does not specify the type of information to be disseminated. Absent that specificity, it is unclear whether or not all information is of high risk, or if only some is of high risk. Since FERC VRF Guideline 5 requires that entities err toward the more conservative, it would appear that IRO-005 R7 assumes that at least one piece of information to disseminate is of a critical nature. However, when discussing the specifics, the SDT believes that the non-dissemination of the information required in IRO-006 R2 alone is unlikely to lead to bulk electric system instability, separation, or cascading failures. As such, the team believes the VRF is appropriate. Additionally, the Medium VRF is consistent with IRO-015 R1.
	FERC VRF G4 Discussion	An entity that does not continually identify TLR level and actions to take on at least an hourly basis may have a negative effect on the reliability of the BES by reducing coordination, but that action alone is unlikely to lead to bulk electric system instability, separation, or cascading failures.
	FERC VRF G5 Discussion	This requirement does not co-mingle reliability objectives.
	Proposed Lower VSL	The Reliability Coordinator initiating the Eastern Interconnection TLR procedure missed identifying the TLR Level and/or a list of congestion management actions to take based on the TLR level chosen for one clock hour during the period from initiation up to the hour when the TLR level was identified as TLR Level 0.
	Proposed Moderate VSL	The Reliability Coordinator initiating the Eastern Interconnection TLR procedure missed identifying the TLR Level and/or a list of congestion management actions to take based on the TLR level chosen for two clock hours during the period from initiation up to the hour when the TLR level was identified as TLR Level 0
	Proposed High VSL	The Reliability Coordinator initiating the Eastern Interconnection TLR procedure missed identifying the TLR Level and/or a list of congestion management actions to take based on the TLR level chosen for three clock hours during the period from initiation up to the hour when the TLR level was identified as TLR Level 0.
Proposed Severe VSL	The Reliability Coordinator initiating the Eastern Interconnection TLR	

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		procedure missed identifying the TLR Level and/or a list of congestion management actions to take based on the TLR level chosen for four or more clock hours during the period from initiation up to the hour when the TLR level was identified as TLR Level 0.
	FERC VSL G1 Discussion	No longer applicable given significant changes in standard structure.
	FERC VSL G2 Discussion	The VSL is written as a graded VSL, meeting guideline 2A. The VSL is written in clear and unambiguous language, meeting Guideline 2B.
	FERC VSL G3 Discussion	The VSL aligns with the language of the requirement, and does not add to nor take away from it.
	FERC VSL G4 Discussion	The Requirement mandates continuous hourly identification of TLR level and actions, and the VSL is based on the continuity of those actions. The VSL is correctly based on multiple violations.

R3	Proposed VRF	Medium
	NERC VRF Discussion	An entity that does not notify entities or request the actions as described in the requirement may have a negative effect on the reliability of the BES by reducing coordination, but that action alone is unlikely to lead to bulk electric system instability, separation, or cascading failures.
	FERC VRF G1 Discussion	The requirement is related to the use of Transmission Loading Relief, but is not related to the appropriateness of using TLR. As such, the VRF is not required to be High.
	FERC VRF G2 Discussion	This standard does not utilize sub-requirements, but instead uses parts. As such, G2 does not apply. However, the VRFs for this requirement are consistent with others in the standard with regard to relative risk.
	FERC VRF G3 Discussion	IRO-005-2 R7 indicates that the dissemination of information from the RC should be considered as having a "High" risk factor. However, IRO-005 R7 does not specify the type of information to be disseminated. Absent that specificity, it is unclear whether or not all information is of high risk, or if only some is of high risk. Since FERC VRF Guideline 5 requires that entities err toward the more conservative, it would appear that IRO-005 R7 assumes that at least one piece of information to disseminate is of a critical nature. However, when discussing the specifics, the SDT believes that the failure to notify or make specific requests from the TLR procedure alone is unlikely to lead to bulk electric system instability, separation, or cascading failures. As such, the team believes the VRF is appropriate.
	FERC VRF G4 Discussion	An entity that does not notify entities or request the actions as described in the requirement may have a negative effect on the reliability of the BES by reducing coordination, but that action alone is unlikely to lead to bulk electric system instability, separation, or cascading failures.
	FERC VRF G5 Discussion	This requirement co-mingles reliability objectives, but does not reflect the lower risk level associated with the less important objective.
	Proposed Lower VSL	The initiating Reliability Coordinator did not notify one or more Reliability Coordinators in the Eastern Interconnection of the TLR

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		Level (3.1).
	Proposed Moderate VSL	N/A
	Proposed High VSL	<p>The initiating Reliability Coordinator did not communicate the list of congestion management actions to one or more of the Reliability Coordinators listed in Requirement R3 Part 3.2.</p> <p>OR</p> <p>The initiating Reliability Coordinator requested some, but not all, of the Reliability Coordinators identified in Requirement R3 Part 3.3 to implement the identified congestion management actions.</p>
	Proposed Severe VSL	The initiating Reliability Coordinator requested none of the Reliability Coordinators identified in Requirement R3 Part 3.3 to implement the identified congestion management actions.
	FERC VSL G1 Discussion	No longer applicable given significant changes in standard structure.
	FERC VSL G2 Discussion	The VSL is written as a graded VSL, meeting guideline 2A. The VSL is written in clear and unambiguous language, meeting Guideline 2B.
	FERC VSL G3 Discussion	The VSL aligns with the language of the requirement, and does not add to nor take away from it.
	FERC VSL G4 Discussion	The VSL is based on a single violation of the requirement.

	Proposed VRF	High
	NERC VRF Discussion	An entity that, when responding to a request to take action as part of the TLR procedure, does not take such action (or alternative action as described in the requirement) could be causing or contributing to bulk electric system instability, separation, or a cascading sequence of failures
	FERC VRF G1 Discussion	The requirement is related to the use of Transmission Loading Relief, but is not related to the appropriateness of using TLR. As such, the VRF is not required to be High.
R4	FERC VRF G2 Discussion	This standard does not utilize sub-requirements, but instead uses parts. As such, G2 does not apply. However, the VRFs for this requirement are consistent with others in the standard with regard to relative risk.
	FERC VRF G3 Discussion	This VRF is consistent with that of IRO-001 R8, which establishes the responsibility of entities to respond to the directives of Reliability Coordinators.
	FERC VRF G4 Discussion	An entity that, when responding to a request to take action as part of the TLR procedure, does not take such action (or alternative action as described in the requirement) could be causing or contributing to bulk electric system instability, separation, or a cascading sequence of failures
	FERC VRF G5 Discussion	This requirement does not co-mingle reliability objectives.

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Proposed Lower VSL	N/A
Proposed Moderate VSL	N/A
Proposed High VSL	N/A
Proposed Severe VSL	The responding Reliability Coordinator did not initiate one or both of the following actions within 15 minutes of receiving a request: 1.) Implemented the requested congestion management actions. 2.) Implemented alternate congestion management actions based on assessment which showed that some or all of the actions communicated in Requirement R3 Part 3.3 would have resulted in a reliability concern or would have been ineffective, and that the alternate congestion management actions were agreed to by the initiating Reliability Coordinator and assessment determined that the alternate congestion management actions would not adversely affect reliability.
FERC VSL G1 Discussion	No longer applicable given significant changes in standard structure.
FERC VSL G2 Discussion	The VSL is written as a pass/fail VSL, and it has been set at the "Severe" level, meeting guideline 2A. The VSL is written in clear and unambiguous language, meeting Guideline 2B.
FERC VSL G3 Discussion	The VSL aligns with the language of the requirement, and does not add to nor take away from it.
FERC VSL G4 Discussion	The VSL is based on a single violation of the requirement.

NERC's VRF Criteria:

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's VRF Guidelines:

VRF G1 — 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. From footnote 15 of the May 18, 2007 Order, FERC's list of critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System includes:

- 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.

VRF G2 — 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.

VRF G3 — 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.

VRF G4 — 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.

VRF G5 — 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’s Criteria for VSLs:

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’s VSL Guidelines:

VSL G1: 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.)

VSL G2: 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. Avoid using ambiguous terms such as “minor” and “significant” to describe noncompliant performance.)

VSL G3: Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement (VSLs should not expand on what is required in the requirement.)

VSL G4: 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.)