

# Violation Risk Factor and Violation Severity Level Justification Document

Project 2010-05.3 Phase 3 of Protection Systems: Remedial Action Schemes

This document provides the standard drafting team (SDT) justification for assignment of violation risk factors (VRFs) and violation severity levels (VSLs) for each requirement in PRC-012-2. 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 developing the VRFs and VSLs for the requirements.

#### **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.

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

#### 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 for 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.

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 PRC-012-2, Requirement R1		
VRF for Requirement R1 is M	edium		
NERC VRF Discussion	A medium VRF is appropriate for this requirement because failure of an entity to submit Attachment 1 information to the responsible Reliability Coordinator for review prior to placing a new or modified RAS in service or retiring an existing RAS could introduce risks to the Bulk Electric System. However, a violation of this requirement, because it is in a planning time frame, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.		
FERC VRF G1 Discussion Guideline 1- Consistency with Blackout Report	In the VSL Order, FERC identified twelve critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System. Requirement R1 relates to two of these areas, specifically (i) protection systems and their coordination; and (ii) clearer criteria for operationally critical facilities. Requirement R1 mandates that entities comply with a review process for new or modified RAS or retirement of RAS. Among the elements of such reviews is the coordination between RAS and other RAS and between RAS and protection and control systems. Requirement R1 also mandates that the RAS-entity provide the Reliability Coordinator relevant RAS information regarding the design and implementation for each new or functionally modified RAS.		
FERC VRF G2 Discussion Guideline 2- Consistency within a Reliability Standard	This requirement does not use sub-requirements, so only one VRF was assigned. The VRF for this requirement is consistent with others in the standard with regard to relative risk; therefore, there is no conflict.		
FERC VRF G3 Discussion Guideline 3- Consistency among Reliability Standards	This requirement is consistent with NERC Reliability Standard PRC-012-1, Requirement 1, Parts R1.1 – R1.5 which specifies attributes of the RRO process to review RAS (R1.1), provision of pertinent RAS data (R1.2), dependability (R1.3) and security (R1.4) of design, and coordination with other RAS and protection systems (R1.5), and has a Medium VRF.		
FERC VRF G4 Discussion Guideline 4- Consistency with NERC Definitions of VRFs	A medium VRF is appropriate for this requirement because failure of an entity to submit Attachment 1 information to the responsible Reliability Coordinator for review prior to placing a new or modified RAS in service or retiring an existing RAS could introduce risks to the Bulk Electric System. However, a violation of this requirement, because it is in a planning time frame, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.		



VRF Justifications for PRC-012-2, Requirement R1		
VRF for Requirement R1 is Medium		
FERC VRF G5 Discussion Guideline 5- Treatment of Requirements that Co- mingle More than One Obligation	This requirement has only one reliability objective; therefore, does not co-mingle obligations.	

VSLs for PRC-012-2, Requirement R1			
Lower	Moderate	High	Severe
N/A	N/A	N/A	The RAS-entity failed to submitprovide the information identified in Attachment 1 to one or more of theeach Reliability Coordinator(s) prior to placing a new or functionally modified RAS in-service or retiring an existing RAS in accordance with Requirement R1.



	VSL Justifications for PRC-012-2, Requirement R1
FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	While this requirement is new, it incorporates the reliability objectives of PRC-012-1, Requirements R1.1 – R1.5 which had four established Levels of Non-Compliance. The requirement is binary with only a Severe VSL so there is no consequence of lowering the current level of compliance.
FERC VSL G2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 2a: The language included in the Severe VSL is clear and unambiguous, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.  Guideline 2b: N/A
FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	The VSL uses similar language to that used in the associated requirement and is therefore consistent with the requirement.



VSL Justifications for PRC-012-2, Requirement R1		
FERC VSL G4	The VSL is based upon a single violation, not a cumulative number of violations.	
Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations		



VRF Justifications for PRC-012-2, Requirement R2		
VRF for Requirement R2 is Medium		
NERC VRF Discussion	A medium VRF is appropriate for Requirement R2 because failure of a Reliability Coordinator to perform the RAS reviews and identify potential risks presented by the RAS 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, a violation of this requirement, because it is in a planning time frame, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.	
FERC VRF G1 Discussion Guideline 1- Consistency with Blackout Report	In the VSL Order, FERC identified twelve critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System. Requirement R2 relates to one of these areas, specifically, protection systems and their coordination. Requirement R2 mandates that Reliability Coordinators review the RAS to determine if a RAS avoids adverse interactions with other RAS and protection and control systems.	
FERC VRF G2 Discussion Guideline 2- Consistency within a Reliability Standard	This requirement does not use sub-requirements so only one VRF was assigned. The VRF for this requirement is consistent with others in the standard with regard to relative risk; therefore, there is no conflict.	
FERC VRF G3 Discussion Guideline 3- Consistency among Reliability Standards	This requirement is consistent with NERC Reliability Standard PRC-014-1, Requirement R1, which is related to the review of RAS.	
FERC VRF G4 Discussion Guideline 4- Consistency with NERC Definitions of VRFs	A medium VRF is appropriate for Requirement R2 because failure of a Reliability Coordinator to perform the RAS reviews and identify potential risks presented by the RAS 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, a violation of this requirement, because it is in a planning time frame, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.	



VRF Justifications for PRC-012-2, Requirement R2		
VRF for Requirement R2 is Medium		
FERC VRF G5 Discussion Guideline 5- Treatment of Requirements that Co- mingle More than One Obligation	This requirement has only one reliability objective; therefore, this requirement does not co-mingle obligations.	

VSLs for PRC-012-2, Requirement R2			
Lower	Moderate	High	Severe
The reviewing Reliability Coordinator performed the review and provided the written feedback in accordance with Requirement R2, but was late by less than or equal to 30- <u>full</u> calendar days.	The reviewing Reliability Coordinator performed the review and provided the written feedback in accordance with Requirement R2, but was late by more than 30-full calendar days but less than or equal to 60-full calendar days.	The reviewing Reliability Coordinator performed the review and provided the written feedback in accordance with Requirement R2, but was late by more than 60-full calendar days but less than or equal to 90-full calendar days.	The reviewing Reliability Coordinator performed the review and provided the written feedback in accordance with Requirement R2, but was late by more than 90- <u>full</u> calendar days.  OR
			The reviewing Reliability Coordinator failed to perform the review or provide feedback in accordance with Requirement R2.



VSL Justifications for PRC-012-2, Requirement R2		
FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	While this requirement is new, it incorporates the reliability objectives of PRC-014-0, Requirement R1 which also had four established Levels of Non-Compliance. This requirement has VSLs comparable to the established Levels of Non-Compliance in that requirement, so there is no consequence of lowering the current level of compliance.	
FERC VSL G2	Guideline 2a: N/A	
Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level	Guideline 2b: The language included in the VSLs is clear and unambiguous, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.	
Assignment Category for "Binary" Requirements Is Not Consistent		
Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language		
FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	The VSL uses similar language to that used in the associated requirement and is therefore consistent with the requirement.	



VSL Justifications for PRC-012-2, Requirement R2		
FERC VSL G4	The VSL is based upon a single violation, not a cumulative number of violations.	
Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations		



VRF Justifications for PRC-012-2, Requirement R3		
VRF for Requirement R3 is Medium		
NERC VRF Discussion	A medium VRF is appropriate for this requirement because failure of a RAS entity to address the reliability issues identified during the RC review before placing it into service could introduce risks to the BES that 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, a violation of this requirement, because it is in a planning time frame, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.	
FERC VRF G1 Discussion Guideline 1- Consistency with Blackout Report	In the VSL Order, FERC identified twelve critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System. Requirement R3 relates to one of these areas, specifically protection systems and their coordination. Requirement R3 requires the RAS-entity to address each identified reliability issue which includes the coordination between RAS and other RAS and between RAS and protection and control systems.	
FERC VRF G2 Discussion Guideline 2- Consistency within a Reliability Standard	This requirement does not use sub-requirements so only one VRF was assigned. The VRF for this requirement is consistent with others in the standard with regard to relative risk; therefore, there is no conflict.	
FERC VRF G3 Discussion Guideline 3- Consistency among Reliability Standards	This requirement is consistent with NERC Reliability Standard PRC-015-0 Requirement R2 which requires the entity to comply with the RRO procedure as defined in PRC-012-1 Requirement R1.	
FERC VRF G4 Discussion Guideline 4- Consistency with NERC Definitions of VRFs	A medium VRF is appropriate for this requirement because failure of a RAS entity to address the reliability issues identified during the RC review before placing it into service could introduce risks to the BES that 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, a violation of this requirement, because it is in a planning time frame, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.	



VRF Justifications for PRC-012-2, Requirement R3		
VRF for Requirement R3 is Medium		
FERC VRF G5 Discussion Guideline 5- Treatment of Requirements that Co- mingle More than One Obligation	This requirement has only one reliability objective; therefore, this requirement does not co-mingle obligations.	

VSLs for PRC-012-2, Requirement R3			
Lower	Moderate	High	Severe
N/A	N/A	N/A	The RAS-entity failed to resolve identified reliability issue(s) to obtain approval from each reviewing Reliability Coordinator prior to placing a new or functionally modified RAS inservice or retiring an existing RAS in accordance with Requirement R3.



VSL Justifications for PRC-012-2, Requirement R3		
FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	While this requirement is new, it incorporates the reliability objectives of PRC-015-0, Requirement R2 which has four established VSLs. This requirement is binary with only a Severe VSL so there is no consequence of lowering the current level of compliance.	
FERC VSL G2  Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties  Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent  Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 2a: The language included in the Severe VSL is clear and unambiguous, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.  Guideline 2b: N/A	
FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	The VSL uses similar language to that used in the associated requirement and is therefore consistent with the requirement.	



VSL Justifications for PRC-012-2, Requirement R3		
FERC VSL G4	The VSL is based upon a single violation, not a cumulative number of violations.	
Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations		



VRF Justifications for PRC-012-2, Requirement R4		
VRF for Requirement R4 is Medium		
NERC VRF Discussion	A medium VRF is appropriate for Requirement R4 because failure to perform the periodic evaluation could allow RAS with diminished effectiveness to go undetected which 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. However, a violation of this requirement, because it is in a planning time frame, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.	
FERC VRF G1 Discussion Guideline 1- Consistency with Blackout Report	In the VSL Order, FERC identified twelve critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System. Requirement R4 relates to one of these areas, specifically protection systems and their coordination. Requirement R4 mandates that entities perform periodic evaluations of each RAS to ensure that changes in System conditions have not changed the effectiveness of the RAS to mitigate the events or System conditions for which it was designed. Requirement R4 incorporates all actions necessary to determine if a RAS avoids adverse interactions with other RAS and protection and control systems	
FERC VRF G2 Discussion Guideline 2- Consistency within a Reliability Standard	This requirement does not use sub-requirements so only one VRF was assigned. The VRF for this requirement is consistent with others in the standard with regard to relative risk; therefore, there is no conflict.	
FERC VRF G3 Discussion Guideline 3- Consistency among Reliability Standards	This requirement is consistent with NERC Reliability Standard PRC-010-2, Requirements R3 which requires the assessment of the effectiveness of UVLS Programs.	
FERC VRF G4 Discussion Guideline 4- Consistency with NERC Definitions of VRFs	A medium VRF is appropriate for Requirement R4 because failure to perform the periodic evaluation could allow RAS with diminished effectiveness to go undetected which 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. However, a violation of this requirement, because it is in a planning time frame, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.	



VRF Justifications for PRC-012-2, Requirement R4		
VRF for Requirement R4 is Medium		
FERC VRF G5 Discussion Guideline 5- Treatment of Requirements that Co- mingle More than One Obligation	This requirement has only one reliability objective; therefore, this requirement does not co-mingle obligations.	

VSLs for PRC-012-2, Requirement R4			
Lower	Moderate	High	Severe
The Transmission Planner Planning Coordinator performed the evaluation in accordance with Requirement R4, in greater than 60-full calendar months but less than or equal to 61-full calendar months.	The Transmission Planner Planning Coordinator performed the evaluation in accordance with Requirement R4, in greater than 61-full calendar months but less than or equal to 62-full-calendar months.	The Transmission PlannerPlanning Coordinator performed the evaluation in accordance with Requirement R4, in greater than 62-full calendar months but less than or equal to 63-full calendar months.  OR The Transmission PlannerPlanning Coordinator performed the evaluation in accordance with Requirement R4, but failed to evaluate one of the Parts 4.1.1 through 4.1.4.	The Transmission Planner Planning Coordinator performed the evaluation in accordance with Requirement R4, but in greater than 63-full calendar months.  OR The Transmission Planner failed to perform the evaluation in accordance with Requirement R4.  OR The Transmission Planner The Planning Coordinator performed the evaluation in accordance with Requirement R4, but failed to evaluate two or more of the Parts 4.1.1 through 4.1.4.



VSLs for PRC-012-2, Requirement R4			
Lower	Moderate	High	Severe
Lower	Moderate	High	OR The Transmission PlannerPlanning Coordinator performed the evaluation in accordance with Requirement R4, but failed to provide the results to one or more of the RAS-owner(s) and the reviewing
			Reliability Coordinator(s)-receiving entities listed in Part 4.2.  OR The Planning Coordinator failed to perform the evaluation in accordance with Requirement R4.

VSL Justifications for PRC-012-2, Requirement R4		
FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	While this requirement is new, it incorporates the reliability objectives of PRC-014-0, Requirement R1 which has four established Levels of Non-Compliance. This requirement has comparable VSLs so there is no consequence of lowering the current level of compliance.	
FERC VSL G2	Guideline 2a: N/A	



VSL Justifications for PRC-012-2, Requirement R4		
Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties	Guideline 2b: The language included in the Lower, Moderate, High, and Severe VSLs is clear and unambiguous, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.	
Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent		
Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language		

VSL Justifications for PRC-012-2, Requirement R4		
FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	The VSL uses similar language to that used in the associated requirement and is therefore consistent with the requirement.	
FERC VSL G4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations	The VSL is based upon a single violation, not a cumulative number of violations.	



VRF Justifications for PRC-012-2, Requirement R5			
VRF for Requirement R5 is M	VRF for Requirement R5 is Medium		
NERC VRF Discussion	A medium VRF is appropriate for Requirement R5 because failure to perform the RAS operational performance analysis could allow RAS with diminished effectiveness to go undetected which 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. However, a violation of this requirement, because it is in a planning time frame, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.		
FERC VRF G1 Discussion Guideline 1- Consistency with Blackout Report	In the VSL Order, FERC identified twelve critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System. Requirement R5 relates to one of these areas, specifically protection systems and their coordination. Requirement R5 mandates that entities perform RAS operational performance analysis to verify that the RAS operation and the resulting System performance was consistent with the Contingency events or System conditions for which it was designed. Requirement R5 incorporates all actions necessary to identify coordination issues between RAS and other RAS and between RAS and protection and control systems.		
FERC VRF G2 Discussion Guideline 2- Consistency within a Reliability Standard	This requirement does not use sub-requirements so only one VRF was assigned. The VRF for this requirement is consistent with others in the standard with regard to relative risk; therefore, there is no conflict.		
FERC VRF G3 Discussion Guideline 3- Consistency among Reliability Standards	This requirement is consistent with NERC Reliability Standard PRC-010-2, Requirements R4 which requires evaluation of the UVLS Program performance during a voltage excursion event.		
FERC VRF G4 Discussion Guideline 4- Consistency with NERC Definitions of VRFs	A medium VRF is appropriate for Requirement R5 because failure to perform the RAS operational performance analysis could allow RAS with diminished effectiveness to go undetected which 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. However, a violation of this requirement, because it is in a planning time frame, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.		



VRF Justifications for PRC-012-2, Requirement R5	
VRF for Requirement R5 is N	ledium
FERC VRF G5 Discussion	This requirement has only one reliability objective; therefore, does not co-mingle obligations.
Guideline 5- Treatment of Requirements that Co- mingle More than One Obligation	

VSLs for PRC-012-2, Requirement R5			
Lower	Moderate	High	Severe
The RAS-ownerentity performed the analysis in greater than 120-calendar days, but less than or equal to 130-calendar days in accordance with Requirement R5, but was late by less than or equal to 10 full calendar days.	The RAS-ownerentity performed the analysis in greateraccordance with Requirement R5, but was late by more than 130-10 full calendar days, but less than or equal to 140-20 full calendar days-in accordance with Requirement R5.	The RAS-ownerentity performed the analysis in greateraccordance with Requirement R5, but was late by more than 140-20 full calendar days, but less than or equal to 150-30 full calendar days-in accordance with Requirement R5.  OR The RAS-ownerentity performed the analysis in accordance with Requirement R5, but failed to address one of the Parts 5.1.1 through 5.1.4.	The RAS-ownerentity performed the analysis in greateraccordance with Requirement R5, but was late by more than 150-30 full calendar days.  OR  The RAS-owner failed to perform the analysis in accordance with Requirement R5.  OR  The RAS-ownerThe RAS-entity performed the analysis in accordance with Requirement R5, but failed to address two or more of the Parts 5.1.1 through 5.1.4.



VSLs for PRC-012-2, Requirement R5			
Lower	Moderate	High	Severe
			OR The RAS-ownerentity performed the analysis in accordance with Requirement R5, but failed to provide the results (Part 5.2) to one or more of the reviewing Reliability Coordinator(s).  OR The RAS-entity failed to perform the analysis in accordance with Requirement R5

VSL Justifications for PRC-012-2, Requirement R5		
FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	While this requirement is new, it incorporates the reliability objectives of PRC-016-0.1, Requirement R1, and PRC-012-1, Requirement R1.7, which have four established Levels of Non-Compliance. This requirement has comparable VSLs so there is no consequence of lowering the current level of compliance.	
FERC VSL G2	Guideline 2a: N/A	
Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties	Guideline 2b: The language included in the Lower, Moderate, High, and Severe VSLs is clear and unambiguous, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.	



Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments	VSL Justifications for PRC-012-2, Requirement R5	
that Contain Ambiguous Language	Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous	

VSL Justifications for PRC-012-2, Requirement R5	
FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	The VSL uses similar language to that used in the associated requirement and is therefore consistent with the requirement.
FERC VSL G4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations	The VSL is based upon a single violation, not a cumulative number of violations.



VRF Justifications for PRC-012-2, Requirement R6			
VRF for Requirement R6 is Mo	VRF for Requirement R6 is Medium		
NERC VRF Discussion	A medium VRF is appropriate for this requirement because the failure of an entity to develop a Corrective Action Plan allows identified risks due to a deficiency in a RAS to remain unmitigated which 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, a violation of this requirement, because it is in a planning time frame and Reliability Coordinators will mandate modified operating limits to maintain BES reliability, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.		
FERC VRF G1 Discussion Guideline 1- Consistency with Blackout Report	In the VSL Order, FERC identified twelve critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System. Requirement R6 addresses one of these areas, specifically protection systems and their coordination. CAPs establish mitigation plans and timetable to address deficiencies that could cause adverse interactions between RAS and other RAS and protection and control systems.		
FERC VRF G2 Discussion Guideline 2- Consistency within a Reliability Standard	This requirement does not use sub-requirements so only one VRF was assigned. The VRF for this requirement is consistent with others in the standard with regard to relative risk; therefore, there is no conflict.		
FERC VRF G3 Discussion Guideline 3- Consistency among Reliability Standards	This requirement is consistent with NERC Reliability Standard PRC-016-0, Requirements R2 and R3 which require a RAS-owner take corrective actions to avoid future misoperations and provide documentation of the corrective action plans to the RRO.		
FERC VRF G4 Discussion Guideline 4- Consistency with NERC Definitions of VRFs	A medium VRF is appropriate for this requirement because the failure of an entity to develop a Corrective Action Plan allows identified risks due to a deficiency in a RAS to remain unmitigated which 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, a violation of this requirement, because it is in a planning time frame and Reliability Coordinators will mandate modified operating limits to maintain BES reliability, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the		



VRF Justifications for PRC-012-2, Requirement R6	
VRF for Requirement R6 is Medium	
	preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.
FERC VRF G5 Discussion Guideline 5- Treatment of Requirements that Co- mingle More than One Obligation	This requirement has only one reliability objective; therefore, this requirement does not co-mingle obligations.

VSLs for PRC-012-2, Requirement R6			
Lower	Moderate	High	Severe
The RAS-ownerentity developed a Corrective Action Plan and submitted it to its reviewing Reliability Coordinator(s) in accordance with Requirement R6, but was late by less than or equal to 10-full calendar days.	The RAS-ownerentity developed a Corrective Action Plan and submitted it to its reviewing Reliability Coordinator(s) in accordance with Requirement R6, but was late by more than 10-full calendar days but less than or equal to 20-full calendar days.	The RAS-ownerentity developed a Corrective Action Plan and submitted it to its reviewing Reliability Coordinator(s) in accordance with Requirement R6, but was late by more than 20-full calendar days but less than or equal to 30-full calendar days.	The RAS-ownerentity developed a Corrective Action Plan and submitted it to its reviewing Reliability Coordinator(s) in accordance with Requirement R6, but was late by more than 30-full calendar days.  OR  The RAS-ownerentity developed a Corrective Action Plan and but failed to submit it to one or more of its reviewing Reliability Coordinator(s) in accordance with Requirement R6.  OR



VSLs for PRC-012-2, Requirement R6			
Lower	Moderate	High	Severe
			The RAS-ownerentity failed to develop a Corrective Action Plan in accordance with Requirement R6.

	VSL Justifications for PRC-012-2, Requirement R6
FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	While this requirement is new, it incorporates the reliability objectives of PRC-016-0, Requirements R2 and R3, and has VSLs comparable to the established Levels of Non-Compliance in those requirements, so there is no consequence of lowering the current level of compliance.
FERC VSL G2 Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties	Guideline 2a: N/A Guideline 2b: The language included in the Lower, Moderate, High, and Severe VSLs is clear and unambiguous, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.



VSL Justifications for PRC-012-2, Requirement R6	
Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent	
Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	

VSL Justifications for PRC-012-2, Requirement R6		
FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	The VSL uses similar language to that used in the associated requirement and is therefore consistent with the requirement.	
FERC VSL G4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations	The VSL is based upon a single violation, not a cumulative number of violations.	



VRF Justifications for PRC-012-2, Requirement R7			
VRF for Requirement R7 is Medium			
NERC VRF Discussion	A medium VRF is appropriate for this requirement because failure of an entity to implement a Corrective Action Plan allows identified risks due to a deficiency in a RAS to remain unmitigated which 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, a violation of this requirement, because it is in a planning time frame and Reliability Coordinators will mandate modified operating limits to maintain BES reliability, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.		
FERC VRF G1 Discussion Guideline 1- Consistency with Blackout Report	In the VSL Order, FERC identified twelve critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System. Requirement R7 relates to one of these areas, specifically protection systems and their coordination. Implemented CAPs address deficiencies that could cause adverse interactions between RAS and other RAS and protection and control systems.		
FERC VRF G2 Discussion Guideline 2- Consistency within a Reliability Standard	This requirement does not use sub-requirements so only one VRF was assigned. The VRF for this requirement is consistent with others in the standard with regard to relative risk; therefore, there is no conflict.		
FERC VRF G3 Discussion Guideline 3- Consistency among Reliability Standards	This requirement is consistent with NERC Reliability Standard PRC-016-0, Requirements R2 and R3 which require a RAS-owner take corrective actions to avoid future misoperations and provide documentation of the corrective action plans to the RRO.		
FERC VRF G4 Discussion Guideline 4- Consistency with NERC Definitions of VRFs	A medium VRF is appropriate for this requirement because failure of an entity to implement a Corrective Action Plan allows identified risks due to a deficiency in a RAS to remain unmitigated which 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, a violation of this requirement, because it is in a planning time frame and Reliability Coordinators will mandate modified operating limits to maintain BES reliability, is unlikely, under emergency, abnormal, or restoration conditions anticipated by the		



VRF Justifications for PRC-012-2, Requirement R7		
VRF for Requirement R7 is Medium		
	preparations, to lead to Bulk Electric System instability, separation, or cascading failures, or to hinder restoration to a normal condition.	
FERC VRF G5 Discussion Guideline 5- Treatment of Requirements that Co- mingle More than One Obligation	This requirement has only one reliability objective; therefore, does not co-mingle obligations.	

VSLs for PRC-012-2, Requirement R7			
Lower	Moderate	High	Severe
The RAS-ownerentity implemented a CAP (in accordance with Requirement R7, Part 7.1), but failed to update the CAP (Part 7.2) if actions or timetables changed and, or failed to notify one or more(Part 7.3) each of the reviewing Reliability Coordinator(s) (Part 7.3), in accordance with Requirement R7of the updated CAP or completion of the CAP.	N/A	N/A	The RAS-ownerentity failed to implement a CAP (Part 7.1)-in accordance with Requirement R7, Part 7.1.



VSL Justifications for PRC-012-2, Requirement R7		
FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	While this requirement is new, it incorporates the reliability objectives of PRC-016-0, Requirement R2 and has VSLs comparable to the established Levels of Non-Compliance in that requirement, so there is no consequence of lowering the current level of compliance.	
FERC VSL G2	Guideline 2a: N/A	
Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments	Guideline 2b: The language included in the Lower and Severe VSLs is clear and unambiguous, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.	
that Contain Ambiguous Language		
FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	The VSL uses similar language to that used in the associated requirement and is therefore consistent with the requirement.	



VSL Justifications for PRC-012-2, Requirement R7		
FERC VSL G4	The VSL is based upon a single violation, not a cumulative number of violations.	
Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations		



VRF Justifications for PRC-012-2, Requirement R8			
VRF for Requirement R8 is Hi	VRF for Requirement R8 is High		
NERC VRF Discussion	A High VRF is appropriate for this Requirement since failure to perform functional testing may allow latent failures to persist in a RAS. These latent failures could result in an unintended operation or a failure to operate, either of which could directly 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. For these reasons, the requirement meets the NERC criteria for a High VRF.		
FERC VRF G1 Discussion Guideline 1- Consistency with Blackout Report	In the VSL Order, FERC identified twelve critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System. Requirement R8 has interactions in three of these areas, specifically (i) protection systems and their coordination, (ii) communication protocol and facilities, and (iii) appropriate use of transmission loading relief. RAS interactions occur with protection systems, utilize communication protocols and facilities for proper functioning, and are often used for transmission loading relief.		
FERC VRF G2 Discussion Guideline 2- Consistency within a Reliability Standard	This requirement does not use sub-requirements, so only one VRF was assigned. The VRF for this requirement is consistent with others in the standard with regard to relative risk; therefore, there is no conflict.		
FERC VRF G3 Discussion Guideline 3- Consistency among Reliability Standards	This requirement is consistent with NERC Reliability Standard PRC-005-3, Requirement R3 which requires the maintenance of Protection System Components and has a VRF of High.		
FERC VRF G4 Discussion Guideline 4- Consistency with NERC Definitions of VRFs	A High VRF is appropriate for this Requirement since failure to perform functional testing may allow latent failures to persist in a RAS. These latent failures could result in an unintended operation or a failure to operate, either of which could directly 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. For these reasons, the requirement meets the NERC criteria for a High VRF.		
FERC VRF G5 Discussion Guideline 5- Treatment of Requirements that Co-	This requirement has only one reliability objective; therefore, this requirement does not co-mingle obligations.		



VRF Justifications for PRC-012-2, Requirement R8		
VRF for Requirement R8 is Hig	gh	
mingle More than One Obligation		

VSLs for PRC-012-2, Requirement R8			
Lower	Moderate	High	Severe
The RAS-ownerentity performed the functional test for a RAS as specified in Requirement R8, but was late by less than or equal to 30-full calendar days-late.	The RAS-ownerentity performed the functional test for a RAS as specified in Requirement R8, but was late by more than 30-full calendar days but less than or equal to 60-full calendar days late.	The RAS-ownerentity performed the functional test for a RAS as specified in Requirement R8, but was late by more than 60-full calendar days but less than or equal to 90-full calendar days late.	The RAS-ownerentity performed the functional test for a RAS as specified in Requirement R8, but was late by more than 90-full calendar days-late.  OR  The RAS-ownerentity failed to perform the functional test for a RAS as specified in Requirement R8.



VSL Justifications for PRC-012-2, Requirement R8		
FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	While this requirement is new, it incorporates the reliability objectives of PRC-017-0, Requirements R1 and R2, which had VSLs of Lower, Moderate, High, and Severe. This requirement has VSLs comparable to the established VSLs so there is no consequence of lowering the current level of compliance.	
FERC VSL G2	Guideline 2a: N/A	
Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties	Guideline 2b: The language included in the VSLs is clear and unambiguous, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.	
Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent		
Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language		



VSL Justifications for PRC-012-2, Requirement R8		
FERC VSL G3 Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement	The VSL uses similar language to that used in the associated requirement and is therefore consistent with the requirement.	
FERC VSL G4 Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations	The VSL is based upon a single violation, not a cumulative number of violations.	



VRF Justifications for PRC-012-2, Requirement R9		
VRF for Requirement R9 is Lo	wer	
NERC VRF Discussion	A Lower VRF is appropriate for this requirement because the failure of an entity to update the RAS database, 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 VRF G1 Discussion Guideline 1- Consistency with Blackout Report	In the VSL Order, FERC identified twelve critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System. Requirement R9 does not address any of the identified areas; therefore, the FERC VRF G1 Discussion is not applicable.	
FERC VRF G2 Discussion Guideline 2- Consistency within a Reliability Standard	This requirement does not use sub-requirements so only one VRF was assigned. The VRF for this requirement is consistent with others in the standard with regard to relative risk; therefore, there is no conflict.	
FERC VRF G3 Discussion Guideline 3- Consistency among Reliability Standards	This requirement is consistent with PRC-010-2 Requirement R6 and PRC-006-1 Requirement R6, which have an approved VRF of Lower.	
FERC VRF G4 Discussion Guideline 4- Consistency with NERC Definitions of VRFs	A Lower VRF is appropriate for this requirement because the failure of an entity to update the RAS database, 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 VRF G5 Discussion Guideline 5- Treatment of Requirements that Co- mingle More than One Obligation	This requirement has only one reliability objective; therefore, this requirement does not co-mingle obligations.	



VSLs for PRC-012-2, Requirement R9				
Lower	Moderate	High	Severe	
The Reliability Coordinator updated the RAS database in accordance with Requirement R9, but was late by less than or equal to 30- <u>full</u> calendar days.	The Reliability Coordinator updated the RAS database in accordance with Requirement R9, but was late by more than 30-full calendar days but less than or equal to 60-full calendar days.	The Reliability Coordinator updated the RAS database in accordance with Requirement R9, but was late by more than 60- <u>full</u> calendar days but less than or equal to 90- <u>full</u> calendar days.	The Reliability Coordinator updated the RAS database in accordance with Requirement R9 but was late by more than 90-full calendar days.  OR The Reliability Coordinator failed to update the RAS database in accordance with Requirement R9.	

VSL Justifications for PRC-012-2, Requirement R9			
FERC VSL G1 Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	While this requirement is new, it incorporates the reliability objectives of PRC-013-0, Requirement R1 and has VSLs comparable to the established Levels of Non-Compliance of that requirements, so there is no consequence of lowering the current level of compliance.		



VSL Justifications for PRC-012-2, Requirement R9			
FERC VSL G2	Guideline 2a: N/A		
Violation Severity Level Assignments Should Ensure Uniformity of Penalties Guideline 2a: The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language	Guideline 2b: The language included in the Lower, Moderate, High, and Severe VSLs is clear and unambiguous, thereby 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 Corresponding Requirement	The VSL uses similar language to that used in the associated requirement and is therefore consistent with the requirement.		
FERC VSL G4	The VSL is based upon a single violation, not a cumulative number of violations. The VSL uses similar		
Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of ViolationsFERC VSL G3	language to that used in the associated requirement and is therefore consistent with the requirement.		
Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement			