

Project 2008-02 Undervoltage Load Shedding (PRC-010-1)

VRF and VSL Justifications

This document provides the Undervoltage Load Shedding Standard Drafting Team's (drafting team's) justification for assignment of violation risk factors (VRFs) and violation severity levels (VSLs) for each requirement in PRC-010-1 – Undervoltage Load Shedding.

Each primary requirement is assigned a VRF and a set of one or more VSLs. These elements support the determination of an initial value range for the Base Penalty Amount regarding violations of requirements in FERC-approved Reliability Standards, as defined in the ERO Sanction Guidelines.

The drafting team 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; place the Bulk Electric System at an unacceptable risk of instability, separation, or Cascading failures; or 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

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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 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.

The following discussion addresses how the drafting team considered FERC's VRF Guidelines 2 through 5. The team did not address Guideline 1 directly because of an apparent conflict between Guidelines 1 and 4. Whereas Guideline 1 identifies a list of topics that encompass nearly all topics within NERC's Reliability Standards and implies that these requirements should be assigned a "High" VRF, Guideline 4 directs assignment of VRFs based on the impact of a specific requirement to the reliability of the system. The drafting team believes that Guideline 4 is reflective of the intent of VRFs in the first instance and, therefore, concentrated its approach on the reliability impact of the requirements.

PRC-010-1 – Undervoltage Load Shedding is a revision of PRC-010-0 – Assessment of the Design and Effectiveness of UVLS Program, with the stated purpose: *To establish an integrated and coordinated approach to the design, evaluation, and reliable operation of Undervoltage Load Shedding Programs.* FERC Order No. 693 requested that PRC-010-0 be modified to require that an integrated and coordinated approach be included in all protection systems on the Bulk Power System, including generators and transmission lines, generators' low voltage ride-through capabilities, and underfrequency loading shedding (UFLS) and undervoltage load shedding (UVLS) programs. PRC-010-1 addresses this directive in addition to consolidating and revising PRC-010-0 with the three (3) other existing UVLS standards: PRC-020-1 – Under-Voltage Load Shedding Program Database, PRC-021-1 – Under-Voltage Load Shedding Program Data, and PRC-022-1 – Under-Voltage Load Shedding Program Performance.

PRC-010-1 has eight (8) requirements that incorporate and enhance the intent of the requirements of PRC-010-0, PRC-020-1, PRC-021-1, and PRC-022-1. The revised standard requires that entities developing an Undervoltage Load Shedding Program demonstrate the program's effectiveness prior to implementation. Applicable entities are then required to adhere to the Undervoltage Load Shedding Program specifications and implementation schedule. The standard also requires an assessment of the program at least once every 60 months (or sooner if needed) and an assessment to evaluate program performance within 12 months of an applicable event. If program deficiencies are identified as a result of any of these assessments, entities are required to develop a Corrective Action Plan within three (3) months. In addition, there are requirements to update, provide data for, and share an Undervoltage Load Shedding database containing information necessary to model the program for use in event analyses and assessments.

The requirements of PRC-010-1 do not map, one-to-one, with the requirements of the legacy standards. The new requirements comingle various reliability attributes of the legacy standards with new reliability objectives, thus a requirement-to-requirement comparison of VRFs is not possible. In developing the new

VRFs for the requirements of PRC-010-1, the drafting team carefully considered the NERC criteria for developing VRFs, as well as the FERC VRF guidelines. The VRFs of FERC-approved PRC-006-1 – Automatic Underfrequency Load Shedding influenced (citing FERC VRF Guideline 3) the drafting team’s VRF decisions, as the drafting team used PRC-006-1 as a model with respect to PRC-010-1’s language and construct.

NERC Criteria - 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 the guidelines shown in the table below:

Lower	Moderate	High	Severe
<p>Missing a minor element (or a small percentage) of the required performance.</p> <p>The performance or product measured has significant value as it almost meets the full intent of the requirement.</p>	<p>Missing at least one significant element (or moderate percentage) of the required performance.</p> <p>The performance or product measured still has significant value in meeting the intent of the requirement.</p>	<p>Missing more than one significant element (or missing a high percentage) of the required performance or is missing a single vital component.</p> <p>The performance or product has limited value in meeting the intent of the requirement.</p>	<p>Missing most or all of the significant elements (or a significant percentage) of the required performance.</p> <p>The performance measured does not meet the intent of the requirement or the product delivered cannot be used in meeting the intent of the requirement.</p>

FERC Order on Violation Severity Levels

In its June 19, 2008 Order on Violation Severity Levels, FERC indicated it would use the following four guidelines for determining whether to approve 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

Guideline 2a: A violation of a “binary” type requirement must be a “Severe” VSL.

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Guideline 2b: 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 and VSL Justifications – PRC-010-1, R1	
Proposed VRF	High
NERC VRF Discussion	This is a planning requirement that meets the NERC criterion for a High VRF. Failure to ensure the effectiveness of an Undervoltage Load Shedding Program could, under anticipated Emergency, abnormal, or restorative conditions, directly contribute to Bulk Electric System instability, separation, or Cascading failures.
FERC VRF G1 Discussion	Guideline 1- Consistency w/ Blackout Report: N/A
FERC VRF G2 Discussion	Guideline 2- Consistency within a Reliability Standard: The requirement has Parts that all support the reliability objective so only one VRF was assigned; therefore no conflict(s) exist.
FERC VRF G3 Discussion	Guideline 3- Consistency among Reliability Standards: This requirement is similar to EOP-003-2, Requirements R3 and R7, which have approved VRFs of High.
FERC VRF G4 Discussion	Guideline 4- Consistency with NERC Definitions of VRFs: This is a planning requirement that meets the NERC criterion for a High VRF. Failure to ensure the effectiveness of an Undervoltage Load Shedding Program as specified in Requirement R1 could, under anticipated Emergency, abnormal, or restorative conditions, directly contribute to Bulk Electric System instability, separation, or Cascading failures.
FERC VRF G5 Discussion	Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation: This requirement does not co-mingle reliability objectives of differing risk; the assigned VRF of High is consistent throughout the requirement.
Proposed Lower VSL	N/A
Proposed Moderate VSL	N/A
Proposed High VSL	N/A
Proposed Severe VSL	The applicable entity that developed the UVLS Program failed to demonstrate the program’s effectiveness prior to implementation in accordance with Requirement R1, including the items specified in Parts 1.1 and 1.2.
NERC VSL Guidelines Discussion	Meets NERC’s VSL Guidelines—there is a binary aspect for failure; the VSL addresses the degrees of compliance with respect to equal importance of the two Parts.

VRF and VSL Justifications – PRC-010-1, R1	
FERC VSL G1 Discussion	<p>Guideline 1- Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance: This is a new requirement; therefore, there is no prior level of compliance.</p>
FERC VSL G2 Discussion	<p>Guideline 2- 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: The proposed VSL for this binary requirement is consistent with the guideline in that it is classified as a severe VSL. Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language The proposed VSL does not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.</p>
FERC VSL G3	<p>Guideline 3- Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement: The proposed VSL uses similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.</p>
FERC VSL G4	<p>Guideline 4- Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations: The VSL is based on a single violation and not cumulative violations.</p>

VRF and VSL Justifications – PRC-010-1, R2	
Proposed VRF	High
NERC VRF Discussion	This is a planning requirement that meets the NERC criterion for a High VRF. Failure to adhere to the Undervoltage Load Shedding Program specifications and implementation schedule could, under anticipated Emergency, abnormal, or restorative conditions, directly contribute to Bulk Electric System instability, separation, or Cascading failures.
FERC VRF G1 Discussion	Guideline 1- Consistency w/ Blackout Report: N/A
FERC VRF G2 Discussion	Guideline 2- Consistency within a Reliability Standard: The requirement has no Parts so only one VRF was assigned.
FERC VRF G3 Discussion	Guideline 3- Consistency among Reliability Standards: This requirement is consistent with PRC-006-1, Requirement R9 and EOP-003-2, Requirement R5, which have approved VRFs of High.
FERC VRF G4 Discussion	Guideline 4- Consistency with NERC Definitions of VRFs: This is a planning requirement that meets the NERC criterion for a High VRF. Failure to adhere to the Undervoltage Load Shedding Program specifications and implementation schedule could, under anticipated Emergency, abnormal, or restorative conditions, directly contribute to Bulk Electric System instability, separation, or Cascading failures.
FERC VRF G5 Discussion	Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation: This requirement does not co-mingle reliability objectives of differing risk; the assigned VRF of High is consistent throughout the requirement.
Proposed Lower VSL	N/A
Proposed Moderate VSL	N/A
Proposed High VSL	The applicable entity failed to adhere to the UVLS Program specifications in accordance with Requirement R2. OR The responsible entity failed to adhere to the UVLS Program implementation schedule in accordance with Requirement R2.
Proposed Severe VSL	The applicable entity failed to adhere to the UVLS Program specifications and implementation schedule in accordance with Requirement R2.
NERC VSL Guidelines Discussion	Meets NERC’s VSL Guidelines—the VSLs cover aspects of the requirement that are equal in importance.

VRF and VSL Justifications – PRC-010-1, R2	
FERC VSL G1 Discussion	<p>Guideline 1- Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance: This is a new requirement; therefore, there is no prior level of compliance.</p>
FERC VSL G2 Discussion	<p>Guideline 2- 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: N/A Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language The proposed VSL does not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.</p>
FERC VSL G3	<p>Guideline 3- Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement: The proposed VSL uses similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.</p>
FERC VSL G4	<p>Guideline 4- Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations: The VSL is based on a single violation and not cumulative violations.</p>

VRF and VSL Justifications – PRC-010-1, R3	
Proposed VRF	Medium
NERC VRF Discussion	This is a planning requirement that meets NERC’s criterion for a Medium VRF. Failure to perform a comprehensive assessment to evaluate the effectiveness of each existing Undervoltage Load Shedding Program in its area at least once every 60 calendar months or sooner if material changes are made to system topology or operating conditions, could, under anticipated Emergency, abnormal, or restorative conditions, directly and adversely 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 the requirement is unlikely to lead to Bulk Electric System instability, separation, or Cascading failures. The applicable entities are always responsible for maintaining the reliability of the Bulk Electric System regardless of the situation.
FERC VRF G1 Discussion	Guideline 1- Consistency w/ Blackout Report: N/A
FERC VRF G2 Discussion	Guideline 2- Consistency within a Reliability Standard: The requirement has Parts that all support the reliability objective so only one VRF was assigned; therefore no conflict(s) exist.
FERC VRF G3 Discussion	Guideline 3- Consistency among Reliability Standards: This requirement is consistent with PRC-010-0, Requirement R1, which has an approved VRF of Medium.
FERC VRF G4 Discussion	Guideline 4- Consistency with NERC Definitions of VRFs: This is a planning requirement that meets NERC’s criterion for a Medium VRF. Failure to perform a comprehensive assessment to evaluate the effectiveness of each existing Undervoltage Load Shedding Program in its area at least once every 60 calendar months or sooner if material changes are made to system topology or operating conditions, could, under anticipated Emergency, abnormal, or restorative conditions, directly and adversely 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 the requirement is unlikely to lead to Bulk Electric System instability, separation, or Cascading failures. The applicable entities are always responsible for maintaining the reliability of the Bulk Electric System regardless of the situation.
FERC VRF G5 Discussion	Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation: This requirement does not co-mingle reliability objectives of differing risk; the assigned VRF of Medium is consistent throughout the requirement.

VRF and VSL Justifications – PRC-010-1, R3	
Proposed Lower VSL	N/A
Proposed Moderate VSL	N/A
Proposed High VSL	N/A
Proposed Severe VSL	The applicable entity failed to perform an assessment at least once during the 60 calendar months in accordance with Requirement R3, including the items specified in Parts 3.1 and 3.2.
NERC VSL Guidelines Discussion	Meets NERC’s VSL Guidelines—there is a binary aspect for failure; the VSLs address the degrees of compliance with respect to equal importance of the two Parts.
FERC VSL G1 Discussion	Guideline 1- Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance: The VSL is consistent in nature with the current VSL associated with the existing requirement being replaced (PRC-010-0, Requirement R1) and therefore does not lower the current level of compliance.
FERC VSL G2 Discussion	Guideline 2- 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: The proposed VSL for this binary requirement is consistent with the guideline in that it is classified as a severe VSL. Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language The proposed VSL does not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.
FERC VSL G3	Guideline 3- Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement: The proposed VSL uses similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.
FERC VSL G4	Guideline 4- Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations: The VSL is based on a single violation and not cumulative violations.

VRF and VSL Justifications – PRC-010-1, R4	
Proposed VRF	Medium
NERC VRF Discussion	This requirement meets NERC’s criterion for a Medium VRF. Failure to perform an assessment to evaluate whether the Undervoltage Load Shedding Program resolved the undervoltage issues associated with a qualifying event in a timely manner 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 the requirement is unlikely to lead to Bulk Electric System instability, separation, or Cascading failures. The applicable entities are always responsible for maintaining the reliability of the Bulk Electric System regardless of the situation.
FERC VRF G1 Discussion	Guideline 1- Consistency w/ Blackout Report: N/A
FERC VRF G2 Discussion	Guideline 2- Consistency within a Reliability Standard: The requirement has no Parts so only one VRF was assigned.
FERC VRF G3 Discussion	Guideline 3- Consistency among Reliability Standards: This requirement is similar to PRC-022-1, Requirement 1 and PRC-006-1, Requirement R11, which have approved VRFs of Medium.
FERC VRF G4 Discussion	Guideline 4- Consistency with NERC Definitions of VRFs: This requirement meets NERC’s criterion for a Medium VRF. Failure to perform an assessment to evaluate whether the Undervoltage Load Shedding Program resolved the undervoltage issues associated with a qualifying event in a timely manner 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 the requirement is unlikely to lead to Bulk Electric System instability, separation, or Cascading failures. The applicable entities are always responsible for maintaining the reliability of the Bulk Electric System regardless of the situation.
FERC VRF G5 Discussion	Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation: This requirement does not co-mingle reliability objectives of differing risk; the assigned VRF of Medium is consistent throughout the requirement.
Proposed Lower VSL	The applicable entity performed an assessment in accordance with Requirement R4 within a time period greater than 12 calendar months but less than or equal to 13 calendar months after an applicable event.
Proposed Moderate VSL	The applicable entity performed an assessment in accordance with Requirement R4 within a time period greater than 13 calendar months but less than or equal to 14 calendar months after an applicable event.

VRF and VSL Justifications – PRC-010-1, R4	
Proposed High VSL	The applicable entity performed an assessment in accordance with Requirement R4 within a time period greater than 14 calendar months but less than or equal to 15 calendar months after an applicable event.
Proposed Severe VSL	The applicable entity performed an assessment in accordance with Requirement R4 within a time period greater than 15 months after an applicable event. OR The applicable entity failed to perform an assessment in accordance with Requirement R4.
NERC VSL Guidelines Discussion	Meets NERC’s VSL Guidelines—there is an incremental aspect to the VSL for tardiness and a binary aspect for failure.
FERC VSL G1 Discussion	Guideline 1- Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance: The VSLs’ associated requirement is different in construct from the existing requirement being replaced (PRC-022-1, Requirement R1) and, therefore, the VSLs cannot be compared. The VSLs for this requirement meet or exceed the current level of compliance.
FERC VSL G2 Discussion	Guideline 2- 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: N/A Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language The proposed VSL does not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.
FERC VSL G3	Guideline 3- Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement: The proposed VSL uses similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.
FERC VSL G4	Guideline 4- Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations: The VSL is based on a single violation and not cumulative violations.

VRF and VSL Justifications – PRC-010-1, R5	
Proposed VRF	Medium
NERC VRF Discussion	This requirement meets NERC’s criterion for a Medium VRF. Failure to develop a Corrective Action Plan to address the deficiencies identified as a result of an Undervoltage Load Shedding Program assessment in a timely manner 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 the requirement is unlikely to lead to Bulk Electric System instability, separation, or Cascading failures. The applicable entities are always responsible for maintaining the reliability of the Bulk Electric System regardless of the situation.
FERC VRF G1 Discussion	Guideline 1- Consistency w/ Blackout Report: N/A
FERC VRF G2 Discussion	Guideline 2- Consistency within a Reliability Standard: The requirement has no Parts so only one VRF was assigned.
FERC VRF G3 Discussion	Guideline 3- Consistency among Reliability Standards: This requirement is similar to PRC-006-1, Requirement R12, which has an approved VRF of Medium.
FERC VRF G4 Discussion	Guideline 4- Consistency with NERC Definitions of VRFs: This requirement meets NERC’s criterion for a Medium VRF. Failure to develop a Corrective Action Plan to address the deficiencies identified as a result of an Undervoltage Load Shedding Program assessment in a timely manner 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 the requirement is unlikely to lead to Bulk Electric System instability, separation, or Cascading failures. The applicable entities are always responsible for maintaining the reliability of the Bulk Electric System regardless of the situation.
FERC VRF G5 Discussion	Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation: This requirement does not co-mingle reliability objectives of differing risk; the assigned VRF of Medium is consistent throughout the requirement.
Proposed Lower VSL	The applicable entity developed a CAP in accordance with Requirement R5, but was late by less than or equal to 15 calendar days.
Proposed Moderate VSL	The applicable entity developed a CAP in accordance with Requirement R5, but was late by more than 15 calendar days but less than or equal to 30 calendar days.

VRF and VSL Justifications – PRC-010-1, R5	
Proposed High VSL	The applicable entity developed a CAP in accordance with Requirement R5, but was late by more than 30 calendar days but less than or equal to 45 calendar days.
Proposed Severe VSL	The applicable entity developed a CAP in accordance with Requirement R5, but was late by more than 45 calendar days. OR The applicable entity failed to develop a CAP in accordance with Requirement R5.
NERC VSL Guidelines Discussion	Meets NERC’s VSL Guidelines—there is an incremental aspect to the VSL for tardiness and a binary aspect for failure.
FERC VSL G1 Discussion	Guideline 1- Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance: The VSLs’ associated requirement is different in construct from the existing requirement being replaced (PRC-022-1, Requirement R1.5) and, therefore, the VSLs cannot be compared. The VSLs for this requirement meet or exceed the current level of compliance.
FERC VSL G2 Discussion	Guideline 2- 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: N/A Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language The proposed VSL does not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.
FERC VSL G3	Guideline 3- Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement: The proposed VSL uses similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.
FERC VSL G4	Guideline 4- Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations: The VSL is based on a single violation and not cumulative violations.

VRF and VSL Justifications – PRC-010-1, R6	
Proposed VRF	Lower
NERC VRF Discussion	This is an administrative planning requirement that meets NERC’s criterion for a Lower VRF. Failure to provide data according to the specified format and schedule to support maintenance of each Undervoltage Load Shedding Program database would not, under the anticipated Emergency, abnormal, or restorative conditions, 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. The applicable entities are always responsible for maintaining the reliability of the Bulk Electric System regardless of the situation.
FERC VRF G1 Discussion	Guideline 1- Consistency w/ Blackout Report: N/A
FERC VRF G2 Discussion	Guideline 2- Consistency within a Reliability Standard: The requirement has no Parts so only one VRF was assigned.
FERC VRF G3 Discussion	Guideline 3- Consistency among Reliability Standards: This requirement is consistent with PRC-006-1, Requirement R8, which has an approved VRF of Lower.
FERC VRF G4 Discussion	Guideline 4- Consistency with NERC Definitions of VRFs: This is an administrative planning requirement that meets NERC’s criterion for a Lower VRF. Failure to provide data according to the specified format and schedule to support maintenance of each Undervoltage Load Shedding Program database would not, under the anticipated Emergency, abnormal, or restorative conditions, 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. The applicable entities are always responsible for maintaining the reliability of the Bulk Electric System regardless of the situation.
FERC VRF G5 Discussion	Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation: This requirement does not co-mingle reliability objectives of differing risk; the assigned VRF of Lower is consistent throughout the requirement.

VRF and VSL Justifications – PRC-010-1, R6	
Proposed Lower VSL	<p>The applicable entity provided data in accordance with Requirement R6, but was late by less than or equal to 30 calendar days per the specified schedule.</p> <p>OR</p> <p>The applicable entity provided data in accordance with Requirement R6, but the data was not according to the specified format.</p>
Proposed Moderate VSL	<p>The applicable entity provided data in accordance with Requirement R6, but was late by more than 30 calendar days but less than or equal to 60 calendar days per the specified schedule.</p>
Proposed High VSL	<p>The applicable entity provided data in accordance with Requirement R6, but was late by more than 60 calendar days but less than or equal to 90 calendar days per the specified schedule.</p>
Proposed Severe VSL	<p>The applicable entity provided data in accordance with Requirement R6, but was late by more than 90 calendar days per the specified schedule.</p> <p>OR</p> <p>The applicable entity failed to provide data in accordance with Requirement R6.</p>
NERC VSL Guidelines Discussion	<p>Meets NERC’s VSL Guidelines—the VSLs cover aspects of the requirement that are not equal in importance; there is an incremental aspect to the VSL for tardiness and a binary aspect for failure.</p>
FERC VSL G1 Discussion	<p>Guideline 1- Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance:</p> <p>The VSLs’ associated requirement is different in construct from the existing requirement being replaced (PRC-021-1, Requirement R1) and, therefore, the VSLs cannot be compared. The VSLs for this requirement meet or exceed the current level of compliance.</p>
FERC VSL G2 Discussion	<p>Guideline 2- Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties</p> <p>Guideline 2a- The Single Violation Severity Level Assignment Category for "Binary" Requirements Is Not Consistent:</p> <p>N/A</p> <p>Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language</p> <p>The proposed VSL does not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.</p>

VRF and VSL Justifications – PRC-010-1, R6	
FERC VSL G3	<p>Guideline 3- Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement: The proposed VSL uses similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.</p>
FERC VSL G4	<p>Guideline 4- Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations: The VSL is based on a single violation and not cumulative violations.</p>

VRF and VSL Justifications – PRC-010-1, R7	
Proposed VRF	Lower
NERC VRF Discussion	This is an administrative planning requirement that meets NERC’s criterion for a Lower VRF. Failure to update an Undervoltage Load Shedding Program database would not, under the anticipated Emergency, abnormal, or restorative conditions, 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. The applicable entities are always responsible for maintaining the reliability of the Bulk Electric System regardless of the situation.
FERC VRF G1 Discussion	Guideline 1- Consistency w/ Blackout Report: N/A
FERC VRF G2 Discussion	Guideline 2- Consistency within a Reliability Standard: The requirement has no Parts so only one VRF was assigned.
FERC VRF G3 Discussion	Guideline 3- Consistency among Reliability Standards: This requirement is consistent with PRC-006-1, Requirement R6, which has an approved VRF of Lower.
FERC VRF G4 Discussion	Guideline 4- Consistency with NERC Definitions of VRFs: This is an administrative planning requirement that meets NERC’s criterion for a Lower VRF. Failure to update an Undervoltage Load Shedding Program database would not, under the anticipated Emergency, abnormal, or restorative conditions, 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. The applicable entities are always responsible for maintaining the reliability of the Bulk Electric System regardless of the situation.
FERC VRF G5 Discussion	Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation: This requirement does not co-mingle reliability objectives of differing risk; the assigned VRF of Lower is consistent throughout the requirement.
Proposed Lower VSL	The applicable entity updated the database in accordance with Requirement R7, but was late by less than or equal to 30 calendar days.
Proposed Moderate VSL	The applicable entity updated the database in accordance with Requirement R7, but was late by more than 30 calendar days but less than or equal to 60 calendar days.
Proposed High VSL	The applicable entity updated the database in accordance with Requirement R7, but was late by more than 60 calendar days but less than or equal to 90 calendar days.

VRF and VSL Justifications – PRC-010-1, R7	
Proposed Severe VSL	<p>The applicable entity updated the database in accordance with Requirement R7, but was late by more than 90 calendar days.</p> <p>OR</p> <p>The applicable entity failed to update the database in accordance with Requirement R7.</p>
NERC VSL Guidelines Discussion	Meets NERC’s VSL Guidelines— there is an incremental aspect to the VSL for tardiness and a binary aspect for failure.
FERC VSL G1 Discussion	<p>Guideline 1- Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance: The existing requirement being replaced (PRC-020-1, Requirement R1) is applicable to the Regional Reliability Organization and has no associated VSLs. Therefore, there is no prior level of compliance.</p>
FERC VSL G2 Discussion	<p>Guideline 2- 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: N/A Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language The proposed VSL does not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.</p>
FERC VSL G3	<p>Guideline 3- Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement: The proposed VSL uses similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.</p>
FERC VSL G4	<p>Guideline 4- Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations: The VSL is based on a single violation and not cumulative violations.</p>

VRF and VSL Justifications – PRC-010-1, R8	
Proposed VRF	Lower
NERC VRF Discussion	This is an administrative planning requirement that meets NERC’s criterion for a Lower VRF. Failure to provide an Undervoltage Load Shedding Program database within a timely manner of a request would not, under the anticipated Emergency, abnormal, or restorative conditions, 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. The applicable entities are always responsible for maintaining the reliability of the Bulk Electric System regardless of the situation.
FERC VRF G1 Discussion	Guideline 1- Consistency w/ Blackout Report: N/A
FERC VRF G2 Discussion	Guideline 2- Consistency within a Reliability Standard: The requirement has no Parts so only one VRF was assigned.
FERC VRF G3 Discussion	Guideline 3- Consistency among Reliability Standards: This requirement is consistent with PRC-006-1, Requirement R7, which has an approved VRF of Lower.
FERC VRF G4 Discussion	Guideline 4- Consistency with NERC Definitions of VRFs: This is an administrative planning requirement that meets NERC’s criterion for a Lower VRF. Failure to provide an Undervoltage Load Shedding Program database within a timely manner of a request would not, under the anticipated Emergency, abnormal, or restorative conditions, 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. The applicable entities are always responsible for maintaining the reliability of the Bulk Electric System regardless of the situation.
FERC VRF G5 Discussion	Guideline 5- Treatment of Requirements that Co-mingle More than One Obligation: This requirement does not co-mingle reliability objectives of differing risk; the assigned VRF of Lower is consistent throughout the requirement.
Proposed Lower VSL	The applicable entity provided its UVLS Program database in accordance with Requirement R8, but was late by less than or equal to 15 calendar days.
Proposed Moderate VSL	The applicable entity provided its UVLS Program database in accordance with Requirement R8, but was late by more than 15 calendar days but less than or equal to 30 calendar days.

VRF and VSL Justifications – PRC-010-1, R8	
Proposed High VSL	The applicable entity provided its UVLS Program database in accordance with Requirement R8, but was late by more than 30 calendar days but less than or equal to 45 calendar days.
Proposed Severe VSL	The applicable entity provided its UVLS Program database in accordance with Requirement R8, but was late by more than 60 calendar days. OR The applicable entity failed to provide its UVLS Program database in accordance with Requirement R8.
NERC VSL Guidelines Discussion	Meets NERC’s VSL Guidelines—there is an incremental aspect to the VSL for tardiness and a binary aspect for failure.
FERC VSL G1 Discussion	Guideline 1- Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance: The existing requirement being replaced (PRC-020-1, Requirement R2) is applicable to the Regional Reliability Organization and has no associated VSLs. Therefore, there is no prior level of compliance.
FERC VSL G2 Discussion	Guideline 2- 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: N/A Guideline 2b: Violation Severity Level Assignments that Contain Ambiguous Language The proposed VSL does not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations.
FERC VSL G3	Guideline 3- Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement: The proposed VSL uses similar terminology to that used in the associated requirement, and is therefore consistent with the requirement.
FERC VSL G4	Guideline 4- Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations: The VSL is based on a single violation and not cumulative violations.