

**Compliance Questionnaire and**

**Reliability Standard Audit Worksheet**

**PRC-008-0 — Implementation and Documentation of Underfrequency Load Shedding Equipment Maintenance Programs**

**Registered Entity:** *(Must be completed by the Compliance Enforcement Authority)*

**NCR Number:** *(Must be completed by the Compliance Enforcement Authority)*

**Applicable Function(s): TO, DP**

**Auditors:**

**Disclaimer**

NERC developed this Reliability Standard Audit Worksheet (RSAW) language in order to facilitate NERC’s and the Regional Entities’ assessment of a registered entity’s compliance with this Reliability Standard. The NERC RSAW language is written to specific versions of each NERC Reliability Standard. Entities using this RSAW should choose the version of the RSAW applicable to the Reliability Standard being assessed. While the information included in this RSAW provides some of the methodology that NERC has elected to use to assess compliance with the requirements of the Reliability Standard, this document should not be treated as a substitute for the Reliability Standard or viewed as additional Reliability Standard requirements. In all cases, the Regional Entity should rely on the language contained in the Reliability Standard itself, and not on the language contained in this RSAW, to determine compliance with the Reliability Standard. NERC’s Reliability Standards can be found on NERC’s website at <http://www.nerc.com/page.php?cid=2|20>. Additionally, NERC Reliability Standards are updated frequently, and this RSAW may not necessarily be updated with the same frequency. Therefore, it is imperative that entities treat this RSAW as a reference document only, and not as a substitute or replacement for the Reliability Standard. It is the responsibility of the registered entity to verify its compliance with the latest approved version of the Reliability Standards, by the applicable governmental authority, relevant to its registration status.

The NERC RSAW language contained within this document provides a non‑exclusive list, for informational purposes only, of examples of the types of evidence a registered entity may produce or may be asked to produce to demonstrate compliance with the Reliability Standard. A registered entity’s adherence to the examples contained within this RSAW does not necessarily constitute compliance with the applicable Reliability Standard, and NERC and the Regional Entity using this RSAW reserves the right to request additional evidence from the registered entity that is not included in this RSAW. Additionally, this RSAW includes excerpts from FERC Orders and other regulatory references. The FERC Order cites are provided for ease of reference only, and this document does not necessarily include all applicable Order provisions. In the event of a discrepancy between FERC Orders, and the language included in this document, FERC Orders shall prevail.

Subject Matter Experts

Identify your company’s subject matter expert(s) responsible for this Reliability Standard. Include the person's title, organization and the requirement(s) for which they are responsible. Insert additional lines if necessary.

**Response: *(Registered Entity Response Required)***

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| --- | --- | --- | --- |
| **SME Name** | **Title** | **Organization** | **Requirement** |
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# Reliability Standard Language

**PRC-008-0 — Implementation and Documentation of Underfrequency Load Shedding Equipment Maintenance Programs**

**Purpose:**

Provide last resort system preservation measures by implementing an Under Frequency Load Shedding (UFLS) program.

**Applicability:**

Transmission Owner required by its Regional Reliability Organization to have a UFLS program

Distribution Provider required by its Regional Reliability Organization to have a UFLS program

**NERC BOT Approval Date: 2/8/2005**

**FERC Approval Date: 3/16/2007**

**Reliability Standard Enforcement Date in the United States: 6/18/2007**

**Requirements:**

**R1.** The Transmission Owner and Distribution Provider with a UFLS program (as required by its Regional Reliability Organization) shall have a UFLS equipment maintenance and testing program in place. This UFLS equipment maintenance and testing program shall include UFLS equipment identification, the schedule for UFLS equipment testing, and the schedule for UFLS equipment maintenance.

**Describe, in narrative form, how you meet compliance with this requirement: *(Registered Entity***

***Response Required)***

# R1 Supporting Evidence and Documentation

**Response: *(Registered Entity Response Required)***

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|  | **Provide the following:**  **Document Title and/or File Name, Page & Section, Date & Version** | | |
| **Title** | | **Date** | **Version** | |
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| *Audit Team: Additional Evidence Reviewed:* | |  |  | |
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***This section must be completed by the Compliance Enforcement Authority***

**Compliance Assessment Approach Specific to PRC-008-0 R1.**

\_\_\_ Review the evidence provided by the entity to determine if the entity has a UFLS program. If yes:

\_\_\_ Review the evidence provided by the entity to determine if the entity has a UFLS

equipment maintenance and testing program.

\_\_\_ Review the evidence provided by the entity to determine if the UFLS maintenance

program has the following:

\_\_\_ UFLS equipment identification

\_\_\_ Schedule for UFLS equipment testing

\_\_\_ Schedule for UFLS equipment maintenance

**Auditors Detailed notes:**

**R2.** The Transmission Owner and Distribution Provider with a UFLS program (as required by its Regional Reliability Organization) shall implement its UFLS equipment maintenance and testing program and shall provide UFLS maintenance and testing program results to its Regional Reliability Organization and NERC on request (within 30 calendar days).

**Describe, in narrative form, how you meet compliance with this requirement: *(Registered Entity***

***Response Required)***

# R2 Supporting Evidence and Documentation

**Response: *(Registered Entity Response Required)***

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Provide the following:**  **Document Title and/or File Name, Page & Section, Date & Version** | | |
| **Title** | | **Date** | **Version** | |
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| *Audit Team: Additional Evidence Reviewed:* | |  |  | |
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***This section must be completed by the Compliance Enforcement Authority***

**Compliance Assessment Approach Specific to PRC-008-0 R2.**

\_\_\_ If the entity has a UFLS program as identified in R1:

\_\_\_Review the evidence provided by the entity to determine if the entity has implemented its UFLS equipment maintenance and testing program as per the schedule defined in its program.

\_\_\_Review the evidence provided by the entity to determine if it has received a request by NERC or

the Regional Reliability Organization/Regional Entity to provide its results.

\_\_\_ Review the evidence provided by the entity to determine if the entity has provided the UFLS

maintenance and testing program results to its Regional Reliability Organization/Regional Entity and NERC within 30 calendar days of receipt of the request. Prior to compliance assessment, determine if a 30 day data request was made (the audit notice constitutes a 30 day request).

**Auditors Detailed notes:**

# Supplemental Information

**PRC-008-0 — Questions**

**Question:** Do you have or is your company required by the region to have a UFLS program?

**Entity** **Response: *(Registered Entity Response Required)***

**Data Request:** Provide a list of all UFLS relays as required to support the UFLS program required by the region.

**Entity** **Response: *(Registered Entity Response Required)***

**Other ‑** The list of questions above is not all inclusive of evidence required to show compliance with the Reliability Standard. Provide additional information here**, as necessary that** demonstrates compliance with this Reliability Standard.

**Entity** **Response: *(Registered Entity Response)***

# Compliance Findings Summary (to be filled out by auditor)

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| **Req.** | **C** | **PV** | **OEA** | **NA** | **Statement** |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |

**Excerpts from FERC Orders -- For Reference Purposes Only**

**Updated Through March 31, 2009**

**PRC-008-0**

**Order 693**

P 1418. Protection and Control systems (PRC) on Bulk-Power System elements are an integral part of reliable grid operation. Protection systems are designed to detect and isolate faulty elements on a system, thereby limiting the severity and spread of system disturbances, and preventing possible damage to protected elements. The function, settings and limitations of a protection system are critical in establishing SOLs and IROLs. The PRC Reliability Standards apply to transmission operators, transmission owners, generator operators, generator owners, distribution providers and regional reliability organizations and cover a wide range of topics related to the protection and control of power systems.

P 1486. PRC-008-0 requires transmission owners and distribution providers to implement UFLS equipment maintenance and testing programs and provide program results to the regional reliability organization.

P 1491. We disagree … that approval or enforcement of PRC-008-0 is linked to approval of PRC-006-0. PRC-008-0 requires that a “transmission provider or distribution provider with a UFLS program (as required by its Regional Reliability Organization) shall have a UFLS equipment and maintenance testing program in place.**”** PRC-006-0 requires each regional reliability organization to develop, coordinate and document a UFLS program that includes specified elements…. Since PRC-008-0 is an existing Reliability Standard that has been followed on a voluntary basis, transmission owners and distribution providers are aware whether they are required to have a UFLS program in place. We approve PRC-008-0 as mandatory and enforceable because it requires entities to have equipment maintenance and testing of their UFLS programs. As stated in the Common Issues section, a reference to an unapproved Reliability Standard may be considered in an enforcement action, but is not a reason to delay approving and enforcing this Reliability Standard. The Commission expects that the program results will be sent to the Regional Entities (instead of the regional reliability organizations) after they are approved.

P 1492. The Commission approves Reliability Standard PRC-008-0 as mandatory and enforceable. …

**Order No. 693-A**

P 139. Each of the requirements in PRC-007-0, PRC-008-0 and PRC-009-0, with the exception of Requirement R1 in PRC-007-0, apply only to those entities that have a UFLS program. Therefore, …, PRC-007-0, PRC-008-0 and PRC-009-0 do not require any entity that does not have a UFLS program to develop one. That requirement would fall under PRC-006-0. To be clear, the Commission will not impose a penalty for the failure to have a UFLS program until such time as PRC-006-0 or a suitable substitute, and the attendant regional UFLS programs, are approved.

P 140. However, we disagree … that the fact that Requirement R1 references the regional UFLS program precludes us from approving PRC-007-0, PRC-008-0 and PRC-009-0, which provide for updating an entity’s UFLS program (PRC-007-0), maintaining the entity’s UFLS facilities (PRC-008-0), and reporting on events that involve the entity’s UFLS (PRC-009-0). Rather, we uphold our earlier decision to approve these three Reliability Standards with the clarification that Requirement R1 of PRC-007-0 is not enforceable until the Commission approves PRC-006-0. We further clarify, consistent with our discussion above, that, until PRC-006-0 is approved, an entity that does not currently have a UFLS program is not required to develop one or to comply with PRC-007-0, PRC-008-0 and PRC-009-0. However, an applicable entity that currently has a UFLS program must continue to maintain that program as required by these three Reliability Standards. As discussed below, the Requirements of PRC-007-0, PRC-008-0 and PRC-009-0 are necessary for Bulk-Power System reliability and are not dependent on PRC-006-0.

P 142. PRC-008-0, Requirement R1 states that the applicable entities “shall have a UFLS equipment maintenance and testing program in place.” These programs are in place to assure that this last resort system, which has been proven to be necessary to limit the geographic scope of blackouts, operates as expected when required to in accordance with the reliability assessments.

P 147. The reliability goal of PRC-007-0, PRC-008-0 and PRC-009-0 is to provide last resort system preservation measures by implementing an UFLS program. The Commission believes that this is an important reliability goal. The Commission understands that, until PRC-006-0 is approved, the UFLS program implemented will not be the one envisioned in PRC-006-0. We believe that, where a user, owner or operator does have a UFLS program, the data retention and reporting requirements incorporated in these Reliability Standards serve an extremely important goal of providing last resort system preservation measures. NERC can analyze the information to monitor whether the last resort system preservation measures are sufficient in the aggregate for the entire Bulk-Power System. Although the ERO and Regional Entities cannot penalize a user, owner or operator for an insufficient UFLS program until the Commission approves PRC-006-0, collection, analysis and submission of the UFLS information described above will provide NERC and the Commission with invaluable information regarding the reliability of the Bulk-Power System

P 148. We further believe that, other than R1 in Reliability Standard PRC-007-0, the Requirements in the PRC Reliability Standards are independently enforceable. For example, R2 of Reliability Standard PRC-007-0 requires a transmission owner or distribution provider with a UFLS program to provide, and annually update, its underfrequency data. Although R2 contains the phrase “(as required by its Regional Reliability Organization),” the Commission believes that it is of vital importance for the transmission owner and distribution provider to update its UFLS data annually and provide it to the ERO. Because we have not approved any regional programs, this parenthetical currently has no meaning in the context of the approved Reliability Standard. Therefore, the Commission believes that these three Reliability Standards only apply to those entities that have a UFLS program, irrespective of whether a region requires it.

P 149. … This Reliability Standard [PRC-008-0] requires each transmission owner and distribution provider with a UFLS program to have a UFLS program in place that includes UFLS equipment identification and the schedule for UFLS equipment testing and maintenance. PRC-008-0 further requires each transmission owner and distribution provider with a UFLS program to implement its UFLS equipment maintenance and testing program and provide UFLS maintenance and testing program results to its regional reliability organization and NERC on request. In this Reliability Standard, any transmission owner or distribution provider that already has a UFLS program must develop its own equipment maintenance and testing program that complies with PRC-008-0. The Commission believes it is of great importance to Bulk-Power System reliability for such entities to perform such maintenance and testing. Because the maintenance and testing programs do not rely on regional reliability organization requirements, but are, rather, developed by the applicable entity itself, the Commission continues to believe that this Reliability Standard is enforceable regardless whether the Commission has approved PRC-006-0.

**Revision History**

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| --- | --- | --- | --- |
| **Version** | **Date** | **Reviewers** | **Revision Description** |
| 1 | December 2009 | RSAW Working Group | New Document. |
| 1 | December 2010 | QRSAW WG | Revised Findings Table, modified Supporting Evidence tables, and added Revision History. |
| 1 | January 2011 | Craig Struck | Reviewed for format consistency and content. |
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