

**Compliance Questionnaire and**

**Reliability Standard Audit Worksheet**

**PRC-017-0 — Special Protection System Maintenance and Testing**

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

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

**Applicable Function(s): TO, GO, 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. Include additional sheets if necessary.

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

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

**PRC-017-0 — Special Protection System Maintenance and Testing**

**Purpose:**

To ensure that all Special Protection Systems (SPS) are properly designed, meet performance requirements, and are coordinated with other protection systems. To ensure that maintenance and testing programs are developed and misoperations are analyzed and corrected.

**Applicability:**

Transmission Owner that owns a SPS

Generator Owner that owns a SPS

Distribution Provider that owns a SPS

**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, Generator Owner, and Distribution Provider that owns an SPS shall have system maintenance and testing program(s) in place. The program(s) shall include:

**R1.1.** SPS identification shall include but is not limited to:

**R1.1.1.** Relays

**R1.1.2.** Instrument transformers

**R1.1.3.** Communications systems, where appropriate

**R1.1.4.** Batteries

**R1.2.** Documentation of maintenance and testing intervals and their basis

**R1.3.** Summary of testing procedure

**R1.4.** Schedule for system testing

**R1.5.** Schedule for system maintenance

**R1.6**. Date last tested/maintained

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

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

**Question:** Do you own a SPS? If so, identify all Special Protection Systems.

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

# 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-017-0 R1**

\_\_\_ Determine if the entity has a Special Protection System maintenance and testing program

\_\_\_ Review the evidence provided by the entity to determine if the following items are included at a minimum:

\_\_\_ The SPS program identifies at least the following:

\_\_\_Relays

\_\_\_Instrument transformers

\_\_\_Communications systems, where appropriate

\_\_\_Batteries

\_\_\_Documentation of maintenance and testing intervals and their basis

\_\_\_Summary of testing procedure

\_\_\_Schedule for system testing

\_\_\_Schedule for system maintenance

\_\_\_Date last tested/maintained

**Detailed notes:**

**R2.** The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall

provide documentation of the program and its implementation to the appropriate Regional

Reliability Organizations 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-017-0 R2**

\_\_\_ Determine if the Regional Reliability Organization/Regional Entity or NERC requested documentation of the entity’s Special Protection System program and implementation

\_\_\_ Determine if the entity provided the documentation to NERC or the Regional Reliability Organization/Regional Entity within 30 calendar days.

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

Special Protection System equipment maintenance and testing program as per the schedule defined in its program.

**Detailed notes:**

# Supplemental Information

**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-017-0**

**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 1541. PRC-017-0 requires transmission owners, generator owners and distribution providers to provide the regional reliability organization with documentation of special protection system maintenance, testing and implementation plans.

P 1546. The Commission approves Reliability Standard PRC-017-0 as mandatory and enforceable.…

**Revision History**

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| --- | --- | --- | --- |
| **Version** | **Date** | **Reviewers** | **Revision Description** |
| 1 | October 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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