

Reliability Standard Audit Worksheet¹

PRC-005-1.1b — Transmission and Generation Protection System Maintenance and Testing

This section must be completed by the Compliance Enforcement Authority.

Registered Entity: NCR Number: Compliance Assessment Date: Compliance Monitoring Method: Applicable Function(s)-²: DP, GO, TO Names of Auditors:

¹ 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 this RSAW, to determine compliance with the Reliability Standard. NERC's Reliability Standards can be found on NERC's website. 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.

² For dispersed power producing resources identified through Inclusion I4 of the Bulk Electric Ststem definition, PRC-005 will be applied to Protection Systems for Facilities used in aggregating dispersed BES generation from the point where those resources aggregate to greater than 75 MVA to a common point of connection at 100 kV or above. This includes Protection Systems that are applied on the portion of the collector system that is included in the BES by part (b) of Inclusion I4 in the BES definition.

Subject Matter Experts

Identify Subject Matter Expert(s) responsible for this Reliability Standard. (Insert additional rows if necessary)

Registered Entity Response (Required):

| SME Name | Title | Organization | Requirement(s) |
|----------|-------|--------------|----------------|
| | | | |
| | | | |
| | | | |

R1 Supporting Evidence and Documentation

- **R1.** Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation or generation interconnection Facility Protection System shall have a Protection System maintenance and testing program for Protection Systems that affect the reliability of the BES. The program shall include:
 - **R1.1.** Maintenance and testing intervals and their basis.
 - **R1.2.** Summary of maintenance and testing procedures.

Registered Entity Response (Required):

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

Registered Entity Evidence (Required):

Provide the following for all evidence submitted (Insert additional rows if necessary): File Name, File Extension, Document Title, Revision, Date, Page(s), Section(s), Section Title(s), Description

Compliance Assessment Approach Specific to PRC-005-1.1b R1

This section must be completed by the Compliance Enforcement Authority

Review the evidence to verify the Registered Entity has:

(R1) Review the evidence provided by the entity to determine if the entity has a transmission Protection

NERC Reliability Standard Audit Worksheet

Compliance Enforcement Authority:

Registered Entity:__

NCR Number:_

Compliance Assessment Date:_____ RSAW Version: RSAW_PRC-005-1.1b_2013_v2.43 Revision Date: May Junely 2014

| Sys | System and/or a generation or generator interconnection Facility Protection System (see Requirement 2). If | | | | |
|---|---|--|--|--|--|
| yes: | | | | | |
| | Review the evidence provided by the entity to verify the entity has a maintenance and testing program | | | | |
| | for the Protection System. The maintenance and testing program should include: | | | | |
| | Protective relays which respond to electrical quantities | | | | |
| | Communication systems necessary for correct operation of protective functions | | | | |
| | Voltage and current sensing devices providing inputs to protective relays | | | | |
| | Station DC supply associated with protective functions (including Station batteries, battery chargers, and | | | | |
| | non battery based DC supply) | | | | |
| | DC control circuitry associated with protective functions through the trip coil(s) of the circuit breakers or | | | | |
| | other interrupting devices. | | | | |
| Review the program and determine if it has the following for each protective system device: | | | | | |
| | (R1.1) Maintenance and testing intervals | | | | |
| | (R1.1) Basis for those intervals | | | | |
| | (R1.2) Summary of Maintenance and Testing procedures | | | | |
| | | | | | |

Note to Auditor:

All equipment specified by the new definition that was not covered by the old definition must be included in the maintenance and testing program (i.e., a periodicity, basis, and testing/maintenance procedure) by April 1, 2013. The actual test should be completed by the end of the first specified testing cycle. (For example, if quarterly and annual battery charger tests are added, all quarterly battery charger tests should be complete by July 1, 2013 and annual tests by April 1, 2014.) For more information, review Technical Justification Resource Document for Project 2010-07 Generator Requirements at the Transmission Interface.

Auditor Notes:

R2 Supporting Evidence and Documentation

R2. Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation or generator interconnection Facility Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Entity on request (within 30 calendar days). The documentation of the program implementation shall include:

R2.1. Evidence Protection System devices were maintained and tested within the defined intervals.

R2.2. Date each Protection System device was last tested/maintained.

NERC Reliability Standard Audit Worksheet Compliance Enforcement Authority: Registered Entity:______ NCR Number:______ Compliance Assessment Date:______

RSAW Version: RSAW_PRC-005-1.1b_2013_v2.43 Revision Date: May Junely 2014

Registered Entity Response (Required):

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

Data Request: Provide a list of all substations 100kV and above, generating stations and generator interconnection Facilities connected to the BES for use in NERC Sampling Methodology.

TEST RECORDS NOTE: If test records are provided as evidence of compliance with R2 please <u>provide an</u> <u>annotated sample test record for each type of test record provided</u>. The sample test record(s) should include descriptive annotations for each relevant section, heading, cell, etc. The annotations should include an explanation of what each relevant section/heading/cell is and what the test results are indicating. The annotations should be written from the perspective that the person reviewing the test record is unfamiliar with your test record format. Examples of annotations could include cell comments in MS Excel spreadsheets, review comments in MS Word documents, and Sticky Note comments in PDF formatted documents, to name a few.

Registered Entity Evidence (Required):

Provide the following for all evidence submitted (Insert additional rows if necessary): File Name, File Extension, Document Title, Revision, Date, Page(s), Section(s), Section Title(s), Description

Compliance Assessment Approach Specific to PRC-005-1.1b R2

This section must be completed by the Compliance Enforcement Authority

Review the evidence to verify the Registered Entity has:

(R2) Review the evidence provided by the entity to determine if the entity is required to have a Protection System maintenance and testing program. If yes:

Review the evidence provided by the entity to determine if the entity provided the above information to its Regional Entity within 30 calendar days of the request (Prior to compliance assessment, determine if a 30 day data request was made (the audit notice constitutes a 30 day request)) and that the documentation included:

(R2.1) Evidence Protection System devices were maintained and tested within the defined intervals. (R2.2) Date when each Protection System device was last tested/maintained.

NERC Reliability Standard Audit Worksheet

Compliance Enforcement Authority:

Registered Entity:_

NCR Number:

Compliance Assessment Date:_____ RSAW Version: RSAW_PRC-005-1.1b_2013_v2.43 Revision Date: May_Junely 2014

Note to Auditor:

CEAs are to obtain the last date a registered entity tested and maintained its Protection System devices in order to verify compliance with PRC-005-1 R2 starting from June 18, 2007. The last maintenance or test date is necessary for a CEA to determine whether a registered entity is conducting maintenance and testing within the intervals defined by its own Protection System maintenance and testing program, including circumstances when the interval began prior to June 18, 2007, the mandatory and enforceable date of the standard.

However, CEAs are not to require registered entities to produce records of testing and maintenance activities conducted prior to June 18, 2007, because keeping such records was not mandatory at that time. Therefore, CEAs are only to require production of actual maintenance and testing records from June 18, 2007 forward.

When obtaining the last date of maintenance and testing activity prior to June 18, 2007, CEAs are to allow several options of evidence, including: (1) the registered entity's actual maintenance and testing records, if available, (2) a simple representation by the registered entity regarding the last known maintenance and testing date, or (3) the registered entity's good faith approximation of the previous maintenance and testing date, based on best available information.

If an entity elects to provide a CEA with the evidence listed in points (2) or (3) above, the CEA is to obtain the entity's description of the basis for its representation of an actual or estimated date. The basis can refer to the registered entity's actual knowledge, approximate periodicity of established maintenance and testing practices, timing of commissioning of equipment, or any other reasonable basis.

Focus on Current Intervals

A CEA is to enforce PRC-005-1 R2 only with consideration of interval dates beginning June 18, 2007 or later if the entity can demonstrate it has conducted the required maintenance and testing at least once since June 18, 2007, unless there is additional cause that warrants requesting additional evidence.

For example, if a registered entity completed its required maintenance and testing activities in November 2007 and provided appropriate maintenance and testing records, the CEA is to accept that evidence and is not to request the registered entity's prior maintenance and testing date if it occurred before June 18, 2007. However, a CEA is to request evidence of the registered entity's last maintenance and testing date if it occurred after June 18, 2007.

A CEA is to obtain one or more of the following as evidence of the last date of maintenance and testing activity that occurred prior to June 18, 2007 (if such evidence is necessary as discussed above):

- 1. Actual maintenance and testing records, if available;
- 2. A simple representation by the registered entity regarding the last known maintenance and testing date and the registered entity's description of the basis for its representation of an actual or estimated date. The basis can refer to the registered entity's actual knowledge, approximate

periodicity of established maintenance and testing practices, timing of commissioning of equipment, or any other reasonable basis; or

3. The registered entity's good faith approximation of the previous maintenance and testing date based on best available information and the registered entity's description of the basis for its representation of an actual or estimated date. The basis can refer to the registered entity's actual knowledge, approximate periodicity of established maintenance and testing practices, timing of commissioning of equipment, or any other reasonable basis.

Auditor Notes:

Supplemental Information

Question: How does your company document and confirm that program implementation is on schedule? Include a discussion of defined maintenance and testing intervals, and your process for tracking the dates each protective device was last tested/maintained.

Question: Describe your maintenance program to periodically test protection systems in order to ensure proper performance. Include in your description how your company's program identifies the equipment specified in the NERC Glossary definition of Protection Systems (e.g. Protective relays, associated communication systems, voltage and current sensing devices, station batteries/chargers and DC control circuitry).

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

<u>Compliance Finding Summary</u> [Author to update table based on number of Requirements in the standard] This section must be completed by the Compliance Enforcement Authority

| Req. | NF | PV | OEA | NA | Statement |
|------|----|----|-----|----|-----------|
| 1 | | | | | |
| 2 | | | | | |

Additional Information:

Reliability Standard

A. Introduction

- 1. Title: Transmission and Generation Protection System Maintenance and Testing
- **2. Number:** PRC-005-1.1b
- **3. Purpose:** To ensure all transmission and generation Protection Systems affecting the reliability of the Bulk Electric System (BES) are maintained and tested.

4. Applicability

- **4.1.** Transmission Owner.
- **4.2.** Generator Owner.
- **4.3.** Distribution Provider that owns a transmission Protection System.
- **5. Effective Date:** In those jurisdictions where regulatory approval is required, all requirements become effective upon approval. In those jurisdictions where no regulatory approval is required, all requirements become effective upon Board of Trustee's adoption or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities.

B. Requirements

- **R1.** Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation or generator interconnection Facility Protection System shall have a Protection System maintenance and testing program for Protection Systems that affect the reliability of the BES. The program shall include:
- **R1.1**. Maintenance and testing intervals and their basis.
- R1.2. Summary of maintenance and testing procedures.
- **R2.** Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation or generator interconnection Facility Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Entity on request (within 30 calendar days). The documentation of the program implementation shall include:
- **R2.1.** Evidence Protection System devices were maintained and tested within the defined intervals.
- **R2.2**. Date each Protection System device was last tested/maintained.
- C. Measures

- M1. Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation or generator interconnection Facility Protection System that affects the reliability of the BES, shall have an associated Protection System maintenance and testing program as defined in Requirement 1.
- M2. Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation or generator interconnection Facility Protection System that affects the reliability of the BES, shall have evidence it provided documentation of its associated Protection System maintenance and testing program and the implementation of its program as defined in Requirement 2.

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Monitoring Responsibility

Regional Entity.

1.2. Compliance Monitoring Period and Reset Time Frame

One calendar year.

1.3. Data Retention

The following evidence retention periods identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit.

The Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation or generator interconnection Facility Protection System, shall retain evidence of the implementation of its Protection System maintenance and testing program for three years.

The Compliance Monitor shall retain any audit data for three years.

1.4. Additional Compliance Information

The Transmission Owner and any Distribution Provider that owns a transmission Protection System and the Generator Owner that owns a generation or generator interconnection Facility Protection System, shall each demonstrate compliance through self-certification or audit (periodic, as part of targeted monitoring or initiated by complaint or event), as determined by the Compliance Monitor.

2. Violation Severity Levels (no changes)

E. Regional Differences

None identified.

Appendix 1 of PRC-005-1.1b

| Dequirement Number and Tax's of Dequirement |
|---|
| Requirement number and lext of Requirement |
| R1. Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall have a Protection System maintenance and testing program for Protection Systems that affect the reliability of the BES. The program shall include: |
| R1.1. Maintenance and testing intervals and their basis. |
| R1.2. Summary of maintenance and testing procedures. |
| R2. Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall provide documentation of its Protection System maintenance and testing program and the implementation of that program to its Regional Reliability Organization on request (within 30 calendar days). The documentation of the program implementation shall include: |
| R2.1 Evidence Protection System devices were maintained and tested within the defined intervals. |
| R2.2 Date each Protection System device was last tested/maintained. |
| Question: |
| Is protection for a radially-connected transformer protection system energized from the BES considered a transmission Protection System subject to this standard? |
| Response: |
| The request for interpretation of PRC-005-1 Requirements R1 and R2 focuses on the applicability of the term "transmission Protection System." The NERC Glossary of Terms Used in Reliability Standards contains a definition of "Protection System" but does not contain a definition of transmission Protection System. In these two standards, use of the phrase transmission Protection System indicates that the requirements using this phrase are applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and trips an interrupting device that interrupts current supplied directly from the BES. |
| A Protection System for a radially connected transformer energized from the BES would be considered a transmission Protection System and subject to these standards only if the protection trips an interrupting device that interrupts current supplied directly from the BES and the transformer is a BES element. |
| |

Appendix 2 of PRC-005-1.1b

Requirement Number and Text of Requirement

R1. Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall have a Protection System maintenance and testing program for Protection Systems that affect the reliability of the BES. The program shall include:

R1.1. Maintenance and testing intervals and their basis.

R1.2. Summary of maintenance and testing procedures.

Question:

- 1. Does R1 require a maintenance and testing program for the battery chargers for the "station batteries" that are considered part of the Protection System?
- 2. Does R1 require a maintenance and testing program for auxiliary relays and sensing devices? If so, what types of auxiliary relays and sensing devices? (i.e transformer sudden pressure relays)
- 3. Does R1 require maintenance and testing of transmission line re-closing relays?
- 4. Does R1 require a maintenance and testing program for the DC circuitry that is just the circuitry with relays and devices that control actions on breakers, etc., or does R1 require a program for the entire circuit from the battery charger to the relays to circuit breakers and all associated wiring?
- 5. For R1, what are examples of "associated communications systems" that are part of "Protection Systems" that require a maintenance and testing program?

Response:

1. While battery chargers are vital for ensuring "station batteries" are available to support Protection System functions, they are not identified within the definition of "Protection Systems." Therefore, PRC-005-1 does not require maintenance and testing of battery chargers.

The currently-effective definition of Protection System, includes battery chargers as an element of the definition. As a result of this inclusion, battery chargers must be maintained and tested. Thus, the modified definition of Protection System supersedes Response #1 in Appendix 2 related to battery chargers.

2. The existing definition of "Protection System" does not include auxiliary relays; therefore, maintenance and testing of such devices is not explicitly required. Maintenance and testing of such devices is addressed to the degree that an entity's maintenance and testing program for 3 DC control circuits involves maintenance and testing of imbedded auxiliary relays. Maintenance and testing of devices that respond to quantities other than electrical quantities (for example, sudden pressure relays) are not included within Requirement R1.

NERC Reliability Standard Audit Worksheet

Compliance Assessment Date:_____ RSAW Version: RSAW_PRC-005-1.1b_2013_v2.43 Revision Date: May_Junely 2014

Compliance Enforcement Authority:

Registered Entity:_

NCR Number:_____

NERC Reliability Standard Audit Worksheet Template

- 3. No. "Protective Relays" refer to devices that detect and take action for abnormal conditions. Automatic restoration of transmission lines is not a "protective" function.
- 4. PRC-005-1 requires that entities 1) address DC control circuitry within their program, 2) have a basis for the way they address this item, and 3) execute the program. PRC-005-1 does not establish specific additional requirements relative to the scope and/or methods included within the program.
- 5. "Associated communication systems" refer to communication systems used to convey essential Protection System tripping logic, sometimes referred to as pilot relaying or teleprotection. Examples include the following:
 - communications equipment involved in power-line-carrier relaying
 - communications equipment involved in various types of permissive protection system applications
 - direct transfer-trip systems
 - digital communication systems (which would include the protection system communications functions of standard IEC 618501 as well as various proprietary systems)

Sampling Methodology

Sampling is essential for auditing compliance with NERC Reliability Standards since it is not always possible or practical to test 100% of either the equipment, documentation, or both, associated with the full suite of enforceable standards. The <u>Sampling Methodology Guidelines and Criteria</u>, or sample guidelines, provided by the Electric Reliability Organization help to establish a minimum sample set for monitoring and enforcement uses in audits of NERC Reliability Standards.

There are two approaches to sampling: statistical and non-statistical, and choosing which to use depends on the objectives for sampling. (When the population sample to be reviewed is documentation, a statistical approach using <u>RAT-STATS</u> is expected.) Both are represented in the sample guideline in line with standard practices for their use. The Audit Team Lead may determine if the scope of the audit samples should be reduced to levels below those established in the sample guideline. In doing so, the audit team will document the rationale for reducing the scope of the of sample population in the RSAW or audit report.

Additionally, separate from the audit, the registered entity may use this methodology to determine the sample population to test in order to provide themselves reasonable assurance that management's expectations are being met by the organization.

NERC Reliability Standard Audit Worksheet Compliance Enforcement Authority: Registered Entity:______ NCR Number:

Compliance Assessment Date:_____ RSAW Version: RSAW_PRC-005-1.1b_2013_v2.43 Revision Date: May Junely 2014

Regulatory Language for Reference Purposes Only (through March 28, 2014)

Order No. 693 [cite]

http://www.nerc.com/files/order_693.pdf

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 1470. PRC-005-1 ensures that all transmission and generation protection systems affecting the reliability of the Bulk-Power System are maintained and tested by requiring the transmission owners, distribution providers, and generator owners to develop, document, and implement a protection system maintenance program that may be reviewed by the regional reliability organization.

P 1474. For the reasons stated in the NOPR, the Commission approves Reliability Standard PRC-005-1 as mandatory and enforceable.

Order Approving Interpretation (September 26, 2011)

http://www.nerc.com/FilingsOrders/us/FERCOrdersRules/Order_approving_PRC-004-1_interp_2011.9.26.pdf

P 7. NERC interprets "transmission Protection System," as it appears in Requirements R1 and R3 of PRC-004-1 and Requirements R1 and R2 of PRC-005-1, to mean "any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the Bulk Electric System (BES) and trips an interrupting device that interrupts current supplied directly from the BES." [Footnote omitted.] In addition, NERC's proposed interpretation states that "[a] Protection System for a radially connected transformer energized from the BES would be considered a transmission Protection System and subject to these standards only if the protection trips an interrupting device that interrupts current supplied directly from the BES and the transformer is a BES element." [Footnote omitted.]

P 11. The Commission approves NERC's interpretation as it is consistent with the intent of Requirements R1 and R3 of PRC-004-1 and Requirements R1 and R2 of PRC-005-1. The interpretation clarifies that the Requirements are "applicable to any Protection System that is installed for the purpose of detecting faults on transmission elements (lines, buses, transformers, etc.) identified as being included in the [BES] and trips an interrupting device that interrupts current supplied directly from the BES."[Footnote omitted.] This

interpretation is consistent with the Commission's understanding that a "transmission Protection System" is installed for the purpose of detecting and isolating faults affecting the reliability of the bulk electric system through the use of current interrupting devices. The Commission further understands that the "interrupting device" referred to in the interpretation is a device that has the performance capability to interrupt full fault current associated with the protected bulk electric system facilities.

Order Approving Modification of Definition for Protection System (February 3, 2012)

P5. The current definition of Protection System includes protective relays, associated communication systems, voltage and current sensing devices, station batteries and DC control circuitry. The revised definition with the proposed modification states:

"The modified definition approved herein shall supersede the interpretation of Requirement R1 of Reliability Standard PRC-005-1 approved concurrently with this order in Docket No. RM10-5-000 on the effective date of the modified definition (the first day of the first calendar quarter twelve months from approval, i.e., April 1, 2013).

"Protection System -

- Protective relays which respond to electrical quantities,
- Communications systems necessary for correct operation of protective functions,
- Voltage and current sensing devices providing inputs to protective relays,
- Station dc supply associated with protective functions (including station batteries, battery chargers, and non-battery-based dc supply), and
- Control circuitry associated with protective functions through the trip coil(s) of the circuit breaker or other interrupting devices."

P6. In the Petition, NERC explains that the modification will improve the definition by clearly identifying the essential elements that constitute a Protection System. NERC states that battery chargers are an essential piece of the bulk power system that should be included in the definition since battery chargers function to assure that batteries associated with protection systems are in a continuous state of readiness.

Order Approving Generator Requirements at the Transmission Interface, Order No. 785, 144 FERC ¶ 61,221 (2013) <u>http://www.nerc.com/FilingsOrders/us/FERCOrdersRules/Final%20Rule%20RM12-16-000.pdf</u>

P7. "NERC asserted that the proposed modifications in Reliability Standards PRC-004-2.1a and PRC-005-1.1b are designed merely to clarify that their requirements extend not only to protection systems associated with the generating facility or station itself, but also to any protection systems associated with the generator interconnection facilities."

P10. In the NOPR, "the Commission found that the clarifications proposed in PRC-004-2.1a and PRC-005-1.1b would mitigate the possibility that the standards' requirements could be interpreted to exclude the generator interconnection facilities."

P 30. "We agree with NERC that the changes mitigate the possibility that entities could interpret the standards to exclude generator interconnection facilities."

Revision History

| 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. |
| | | | Added test record annotation remarks for R2 |
| | | | evidence. |
| 1.1 | September 2011 | Craig Struck | Format update for 2012. |
| 1.1 | October 2011 | NERC Legal | Updated Excerpts from FERC Orders from March |
| | | | 31, 2009 through and including October 19, |
| | | | 2011. |
| 2 | March 2013 | RSAW WG | Updated template, added interpretation, revised |
| | | | for new definition of protection system, and |
| | | | updated title. |
| 2.1 | March 2014 | RSAW Task Force | Added auditor guidance from CAN-0008, CAN- |
| | | | 0009, and CAN-0043. |
| 2.2 | March 2014 | RSAW Task Force | Revised to reflect .1 errata changes. Legal |
| | | | updated Regulatory Language section. |
| 2.3 | May 2014 | NERC Compliance | Update appendix 2 of standard to delete |
| | | | question excluding battery charges. |
| <u>2.4</u> | <u>Julyne 2014</u> | NERC Compliance, | Revised to reflect applicability for dispersed |
| | | <u>Standards</u> | power producing resources. |