Standard Development Roadmap

This section is maintained by the drafting team during the development of the standard and will be removed when the standard becomes effective.

Development Steps Completed:

1. Draft 1 of SAR posted for comment June 11, 2007 – July 10, 2007.
2. SAR approved on August 13, 2007.
3. First posting of revised standard PRC-001-2 on September 11, 2009
4. PRC-001-2 was approved by the NERC Board of Trustees on May 9, 2012, retiring legacy Requirements R2, R5, and R6 of PRC-001-1.

Note: The Project 2007-03 Real-time Operations SDT revised PRC-001-1 by retiring the three operating time frame Requirements R2, R5, and R6. The resulting clean version of PRC-001-2 containing the remaining three legacy Requirements R1, R3, and R4 of PRC-001-1, was adopted by the NERC Board of Trustees on May 9, 2012. The Project 2007-06 System Protection Coordination SDT is recommending retirement of the two planning time frame Requirements, R2 and R3 of PRC-001-2 (formerly Requirements R3 and R4 of PRC-001-1) because the reliability objectives of those requirements are addressed in PRC-027-1. This redlined version shows the changes proposed to PRC-001-2. A mapping document is also posted showing the disposition of those legacy requirements of PRC-001-2 to the proposed requirements of PRC-027-1. The ballot of PRC-001-3 is associated with the approval of PRC-027-1 and the implementation plan for this project.

Proposed Action Plan and Description of Current Draft:

The Project 2007-06 System Protection Coordination SDT is recommending retirement of the legacy Requirements R2 and R3 of PRC-001-2 because the reliability objectives of those requirements are addressed in the new Reliability Standard PRC-027-1 — Protection System Coordination for Performance During Faults. This redlined version of PRC-001-2 shows the proposed changes. The SPC SDT is posting PRC-001-3 and PRC-027-1 for stakeholder comments under a 30-day formal comment period with a parallel successive ballot. The ballot of PRC-001-3 is associated with the approval of PRC-027-1 and the implementation plan for this project.

Future Development Plan:

Anticipated Actions	Anticipated Date
30-day Formal Comment Period with Parallel Successive Ballot	June 2013
Recirculation Ballot	August 2013
BOT Adoption	November 2013

Definitions of Terms Used in Standard

This section includes all newly defined or revised terms used in the proposed standard. Terms already defined in the Reliability Standards Glossary of Terms are not repeated here. New or revised definitions listed below become approved when the proposed standard is approved. When the standard becomes effective, these defined terms will be removed from the individual standard and added to the glossary.

There are no new or revised definitions proposed in this standard revision.

A. Introduction

1. **Title:** **System Protection Coordination**

2. **Number:** PRC-001-3

3. **Purpose:**

   To ensure system protection is coordinated among operating entities.

4. **Applicability:**

   4.1. Functional Entities:

   4.1.1 Transmission Operator

   4.1.2 Generator Operator

   4.1.3 Balancing Authority

   4.2. Facilities:

   4.2.1 Protection Systems that are installed for the purpose of detecting Faults on BES Elements (lines, buses, transformers, etc.)

   4.2.2 Protection Systems used for underfrequency load-shedding systems installed per ERO underfrequency load-shedding requirements.

   4.2.3 Protection Systems used for undervoltage load-shedding systems installed to prevent system voltage collapse or voltage instability for BES reliability.

   4.2.4 Protection Systems installed as a Special Protection System (SPS) for BES reliability.

   4.2.5 Protection Systems for generator Facilities that are part of the BES, including:

   4.2.5.1 Protection Systems that act to trip the generator either directly or via lockout or auxiliary tripping relays.

   4.2.5.2 Protection Systems for generator step-up transformers for generators that are part of the BES.

   4.2.5.3 Protection Systems for transformers connecting aggregated generation, where the aggregated generation is part of the BES (e.g., transformers connecting facilities such as wind-farms to the BES).

   4.2.5.4 Protection Systems for station service or excitation transformers connected to the generator bus of generators which are part of the BES, that act to trip the generator either directly or via lockout or tripping auxiliary relays.

5. **Effective Date:** All requirements become effective the first day of the first calendar quarter twelve months following applicable regulatory approval. In those jurisdictions where regulatory approval is not required, the standard shall become effective on the first day of the first

calendar quarter that is twelve months beyond the date this standard is approved by the NERC Board of Trustees, or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities.

B. Requirements

R1. Each Transmission Operator, Balancing Authority, and Generator Operator shall be familiar with the purpose and limitations of protection system schemes applied in its area. *[Violation Risk factor: High][Time Horizon: Operations Planning, Same-day Operations, Real-time Operations]*

C. Measures

M1. For Requirement 1, each Transmission Operator, Balancing Authority, and Generator Operator shall have evidence that may include, but is not limited to, documentation indicating that training in basic relaying and any Special Protection Systems within its area was provided to its applicable personnel.

D. Compliance

Updated to add latest default language.

1. Compliance Monitoring Process

1.1. Compliance Enforcement Authority

As defined in the NERC Rules of Procedure, "Compliance Enforcement Authority" means NERC or the Regional Entity in their respective roles of monitoring and enforcing compliance with the NERC Reliability Standards.

1.2. 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.

Updated to add a time retention period for the remaining requirement.

Each responsible entity shall keep evidence to demonstrate compliance with Requirement R1 for the previous three calendar years.

If an entity is found non-compliant, the entity shall keep information related to the noncompliance until mitigation is complete and approved or for the time period specified above, whichever is longer.

The Compliance Enforcement Authority shall keep the last periodic audit report and all requested and submitted subsequent compliance records.

1.3. Compliance Monitoring and Assessment Processes

One or more of the following methods will be used to assess compliance:

- Compliance Audit

- Self-certification
- Spot Checking
- Compliance Investigation
- Self-Reporting
- Complaint

1.4. Additional Compliance Information

None.

2. Violation Severity Levels

Requirement #	VRF	Time Horizon	Lower	Moderate	High	Severe
R1	High	Operations Planning, Same-day Operations, Real-time Operations	N/A	N/A	The responsible entity failed to be familiar with the limitations of protection system schemes applied in its area.	The responsible entity failed to be familiar with the purpose of protection system schemes applied in its area.

E. Regional Differences

None identified.

Version History

Version	Date	Action	Change Tracking
0	April 1, 2005	Effective Date	New
0	August 8, 2005	Removed "Proposed" from Effective Date	Errata
0	August 25, 2005	Fixed Standard number in Introduction from PRC-001-1 to PRC-001-0	Errata
1	November 1, 2006	Adopted by Board of Trustees	Revised
2	May 9, 2012	Delete data Requirements R2, R5, and R6, as they are now addressed in TOP-003-2.	Revised
3	May 9, 2012	Adopted by Board of Trustees	Revised
4	TBD	Delete Requirements R2 and R3, as they are now addressed in PRC-027-1.	Revised