

## 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. SAR version 1 posted on May 15, 2007.
2. SAR version 1 comment period closed on June 13, 2007.
3. SAR version 2 posted on August 7, 2007.
4. SAR version 2 comment period closed on September 7, 2007.
5. SAR approved by SC on November 1, 2007.
6. First posting of revised standards on October 7, 2008.
7. Second posting of revised standards on April 7, 2009.
8. Third posting of revised standards on August 25, 2009.
9. Fourth posting of revised standard on August 4, 2010.
10. Fifth posting of revised standard on April 26, 2011.
11. Sixth posting of revised standard on December 14, 2011.
12. Seventh posting of revised standards on March 22, 2012.

Note: The Project 2007-03 SDT is recommending retirement of three requirements in PRC-001-1 because those requirements address data and data requirements which is covered in TOP-003-2. This redline shows the retired requirements, and a mapping document showing the approved requirements in PRC-001 and the proposed disposition of those requirements is posted on the Project 2007-03 page. The ballot of the conforming changes to PRC-001 is associated with the approval of TOP-003-2 and the implementation plan for this project.

More complete revisions to PRC-001 are addressed in the scope of Project 2007-06 SDT.

### Proposed Action Plan and Description of Current Draft:

The SDT began meeting in January 2008, following the approval of the SAR by the SC. The original schedule showed completion of the project in 4Q09. As part of the proposed revisions, TOP-004-2, TOP-005-1, TOP-006-1, TOP-007-0, and TOP-008-0, and PER-001-0 will be retired. The requirements in those standards have been eliminated or moved to other standards within this project. The SDT is also recommending that three requirements in PRC-001-1 be retired due to the fact that those requirements deal with data and data requirements will be covered in the proposed TOP-003-2.

### Future Development Plan:

Anticipated Actions	Anticipated Date
1. Post for successive ballot.	1Q12
2. Post for recirculation ballot.	2Q12
3. Submit to BOT.	2Q12

### **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-001-2

3. **Purpose:**

To ensure system protection is coordinated among operating entities.

4. **Applicability**

4.1. Balancing Authorities

4.2. Transmission Operators

4.3. Generator Operators

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 no regulatory approval is required, the requirements become effective the first day of the first calendar quarter twelve months following Board of Trustees' adoption.

## 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]*

**R2.** A Generator Operator or Transmission Operator shall coordinate new protective systems and changes as follows.

**R2.1.** Each Generator Operator shall coordinate all new protective systems and all protective system changes with its Transmission Operator and Host Balancing Authority. *[Violation Risk Factor: High][Time Horizon: Operations Planning, Same-day Operations, Real-time Operations]*

**R2.2.** Each Transmission Operator shall coordinate all new protective systems and all protective system changes with neighboring Transmission Operators and Balancing Authorities. *[Violation Risk Factor: High][Time Horizon: Operations Planning, Same-day Operations, Real-time Operations]*

**R3.** Each Transmission Operator shall coordinate protection systems on major transmission lines and interconnections with neighboring Generator Operators, Transmission Operators, and Balancing Authorities. *[Violation Risk Factor: High][Time Horizon: Operations Planning, Same-day Operations, Real-time Operations]*

## C. Measures

**M1.** Each Generator Operator and Transmission Operator shall have and provide upon request evidence that could include, but is not limited to, revised fault analysis study, letters of agreement on settings, notifications of changes, or other equivalent evidence that will be used to confirm that there was coordination of new protective systems or changes as noted in Requirements 2, 2.1, and 2.2.

## **D. Compliance**

### **1. Compliance Monitoring Process**

#### **1.1. Compliance Enforcement Authority**

The Regional Entity shall be responsible for compliance monitoring.

#### **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.

Each Generator Operator and Transmission Operator shall have current, in-force documents available as evidence of compliance for Measure 1.

If an entity is found non-compliant, the entity shall keep information related to the noncompliance until found compliant or for two years plus the current year, whichever is longer.

Evidence used as part of a triggered investigation shall be retained by the entity being investigated for one year from the date that the investigation is closed, as determined by the Compliance Monitor,

The Compliance Monitor 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:

- Self-certification (Conducted annually with submission according to schedule.)
- Spot Check Audits (Conducted anytime with up to 30 days notice given to prepare.)
- Periodic Audit (Conducted once every three years according to schedule.)
- Triggered Investigations (Notification of an investigation must be made within 60 days of an event or complaint of noncompliance. The entity will have up to 30 days to prepare for the investigation. An entity may request an extension of the preparation period and the extension will be considered by the Compliance Monitor on a case-by-case basis.)

#### **1.4. Additional Compliance Information**

None.

### **2. Violation Severity Levels**



Reqmt. #	VRF	Time Horizon	Lower	Moderate	High	Severe
<b>R1</b>	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.
<b>R2</b>	N/A	N/A	N/A	N/A	N/A	N/A
<b>R2.1</b>	High	Operations Planning, Same-day Operations, Real-time Operations	The Generator Operator failed to coordinate one new protective system or protective System change with either its Transmission Operator or its Host Balancing Authority or both.	The Generator Operator failed to coordinate two new protective systems or protective System changes with either its Transmission Operator or its Host Balancing Authority, or both.	The Generator Operator failed to coordinate three new protective systems or protective System changes with either its Transmission Operator or its Host Balancing Authority, or both.	The Generator Operator failed to coordinate more than three new protective systems or protective System changes with its Transmission Operator or its Host Balancing Authority, or both.
<b>R2.2</b>	High	Operations Planning, Same-day Operations, Real-time Operations	The Transmission Operator failed to coordinate one new protective system or protective System change with neighboring Transmission Operators or Balancing Authorities, or both.	The Transmission Operator failed to coordinate two new protective systems or protective System changes with neighboring Transmission Operators or Balancing Authorities, or both.	The Transmission Operator failed to coordinate three new protective systems or protective System changes with neighboring Transmission Operators or Balancing Authorities, or both.	The Transmission Operator failed to coordinate more than three new protective systems or protective System changes with neighboring Transmission Operators or Balancing Authorities, or both.
<b>R3</b>	High	Operations Planning, Same-day	The Transmission Operator failed	The Transmission Operator failed	The Transmission Operator failed	The Transmission Operator failed

		Operations, Real-time Operations	to coordinate protection Systems on major transmission lines and interconnections with one of its neighboring Generator Operators, Transmission Operators, or Balancing Authorities.	to coordinate protection Systems on major transmission lines and interconnections with two of its neighboring Generator Operators, Transmission Operators, or Balancing Authorities.	to coordinate protection Systems on major transmission lines and interconnections with three of its neighboring Generator Operators, Transmission Operators, or Balancing Authorities.	to coordinate protection Systems on major transmission lines and interconnections with three or more of its neighboring Generator Operators, Transmission Operators, and Balancing Authorities.
--	--	----------------------------------	--	--	--	---

**E. Regional Differences**

None identified.

**Version History**

<b>Version</b>	<b>Date</b>	<b>Action</b>	<b>Change Tracking</b>
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	TBD	Delete data requirements as they are now handled in TOP-003-2.	Deleted Requirements 2, 5, and 6.