

# Implementation Plan

Project 2007-06 System Protection Coordination PRC-027-1

# **Approvals Requested**

- PRC-027-1 Protection System Coordination for Performance During Faults
- PRC-001-3 System Protection Coordination

## **Retirements Requested**

PRC-001-2 System Protection Coordination, Requirements R2 and R3

## **Applicable Entities**

Standard	Applicable Entities					
	TO	GO	DP	ТОР	GOP	ВА
PRC-027-1: Protection System Coordination for Performance During Faults	X	X	X			
PRC-001-3: System Protection Coordination				Х	Х	Х

#### **Defined Terms**

The standard drafting team proposes the following new definitions for use only within PRC-027-1:

## **Interconnecting Element**

A Bulk Electric System (BES) Element that electrically joins Facilities:

- a) owned by separate Registered Entities, or
- b) owned by the same Registered Entity that represents multiple functional entity responsibilities (Transmission Owner, Generator Owner, or Distribution Provider)

#### **Protection System Coordination Study**

A study documenting that existing or proposed Protection Systems operate in the intended sequence for clearing Faults.

#### **Background**

On December 7, 2006, the NERC Planning Committee approved the assessment of Standard PRC-001-1 (System Protection Coordination) prepared by the NERC System Protection and Control Task Force (SPCTF). The SPCTF asserted:



"The applicable entities in the existing Standard are incorrect for many of the requirements, and the requirements themselves are vague and not measurable. In addressing the 'operating horizon, operations planning horizon, and planning horizon' protection coordination issues, the deficiencies in the current standard are magnified."

## And further:

"The SPCTF... recommends that the requirements for the operating horizon and planning horizon be clearly delineated and warrants consideration of dividing this standard into two standards."

The Standard Committee approved the Standard Authorization Request with modifications by the SPCTF for posting on June 5, 2007. The SAR was posted for comment from June 11, 2007 – July 10, 2007, and was subsequently approved.

With the development of the proposed Reliability Standard PRC-027-1, the Standard Drafting Team (SDT) for Project 2007-06 – System Protection Coordination, has addressed observations and recommendations of the NERC SPCTF assessment of PRC-001-1 by:

- Incorporating and building upon the elements of the two planning horizon
  Requirements R3 and R4 of PRC-001-1 (now R2 and R3 of PRC-001-2) and moving those
  requirements into a new standard (as recommended by the SPCTF assessment),
  focusing on the performance of Protection Systems during Faults.
- 2. Assigning responsibility for coordination of Protection Systems during Faults to the appropriate functional entities the Protection System equipment owners, specifically: Transmission Owners, Generator Owners, and Distribution Providers.
- 3. Transferring the responsibility of addressing the three operating horizon Requirements R2, R5, and R6 of PRC-001-1 to Project 2007-03 Real-time Operations for inclusion in the revisions of the appropriate operating standard(s) within that project. (The NERC Board of Trustees approved these changes proposed by the Project 2007-03 team when it approved PRC-001-2 on May 9, 2012.)

#### **Effective Date of New or Revised Standards**

## PRC-027-1 – Protection System Coordination for Performance During Faults

PRC-027-1 shall become effective on the first day of the first calendar quarter that is twelve (12) months after the date that the standard is approved by an applicable governmental authority or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first calendar quarter that is twelve (12) months after the date the standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.



## PRC-001-3 – System Protection Coordination

PRC-001-3 shall become effective on the first day of the first calendar quarter that is twelve (12) months after the date that the standard is approved by an applicable governmental authority or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first calendar quarter that is twelve (12) months after the date the standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.

#### **Effective Date for Definitions**

The two proposed definitions "Interconnecting Element" and "Protection System Coordination Study" shall each become effective concurrently with PRC-027-1.

#### Retirement

PRC-001-2 – System Protection Coordination shall be retired at midnight of the day immediately prior to the first day of the first calendar quarter that is twelve (12) months after the date that the PRC-001-3 is approved by an applicable governmental authority or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, PRC-001-2 shall be retired at midnight of the day immediately prior to the first day of the first calendar quarter that is twelve (12) months after the date that the PRC-001-3 is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.