

## 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	TOP	GOP	BA
PRC-027-1: Protection System Coordination for Performance During Faults	X	X	X			
PRC-001-3: System Protection Coordination				X	X	X

#### Defined Terms ~~in the NERC Glossary~~

The standard drafting team proposes the following new definitions for use only within PRC-027-1; ~~and should remain with the standard upon approval rather than being moved to the NERC Glossary of Terms:~~

#### Interconnecting Element:

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

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

#### Protection System Coordination Study:

A study documenting that ~~demonstrates~~ existing or proposed Protection Systems operate in the ~~desired~~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 ~~followed the~~ addressed observations and ~~recommendation~~ recommendations of the NERC SPCTF assessment of PRC-001-1 ~~which had six requirements. The SDT accomplishes this~~ by:

1. 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.)

~~4. Leaving the legacy Requirement R1 of PRC-001-2 in PRC-001-3 (thereby not creating a reliability gap) until it is incorporated into a new or revised reliability standard.~~

~~Note: The drafting team added Measure (M1) to PRC-001-3 related to Requirement R1.~~

#### **Effective Date of New or Revised Standards ~~and Definitions~~**

#### **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 ~~beyond~~ after the date that ~~this~~ the standard is approved by an applicable ~~regulatory~~ authorities. In those jurisdictions governmental authority or as otherwise provided for in a

jurisdiction where ~~regulatory approval~~ 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 ~~beyond~~ after the date ~~this~~ the standard is ~~approved~~ adopted by the NERC Board of Trustees, or as otherwise ~~made effective pursuant to the laws applicable to such ERO governmental authorities. For Interconnected Elements between Canadian Facilities (provided for in~~ that recognize the NERC Board of Trustees or other ERO governmental authority approval) and U.S. Facilities (that recognize FERC approval), the effective date shall be the FERC approved effective date jurisdiction.

**PRC-001-3 – System Protection Coordination**

~~Same effective date as PRC-027-1.~~

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 (~~Interconnected Facilities~~“Interconnecting Element” and “Protection System Coordination Study”) shall each become effective ~~at the same time as concurrently with~~ PRC-027-1.

**Retirement:**

~~PRC-001-2 – Protection System Coordination shall be retired at midnight the day before PRC-001-3 becomes effective.~~

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.