



AESO Reliability Standards Monthly Report

November/December 2009

PRC-004-1 Analysis & Mitigation of Transmission/Generation Protection System Misoperations PRC-005-1 Transmission & Generation Protection System Maintenance & Testing

Purpose:

Request for Interpretation, revised NERC interpretation.

Standard:

PRC-004-1 has been in effect since August 1, 2006 and PRC-005-1 since May 1, 2006. There is a WECC standard PRC-004-WECC-1.

Request:

The Y-W Electric Association, Inc. and Tri-State Generation and Transmission Association, Inc. request:

Y-WEA and Tri-State respectfully request an interpretation of the term "Transmission Protection System" and specifically whether protection for a radially-connected transformer protection system energized from the BES is considered a transmission Protection System and is subject to these standards.

NERC Interpretation:

The request for interpretation of PRC-004-1 Requirements R1 and R3 and 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. The term transmission Protection System is 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 initiating action to clear the protected element from all local sources.

In general, a radially connected transformer protection system energized from the BES would not be considered a transmission Protection System. In the event that the transformer low side is connected to a potential source (generator or networked low side system) and there are Protection Systems installed to detect and initiate actions for transmission system faults, then these Protection Systems would be considered transmission Protection Systems.

It should also be noted that due to the differences among the Regional Entity definitions of the BES, requests for specific clarification of the regional definition, if needed, should be directed to the appropriate Regional Entity.

Applicability:

Transmission Owner, Generator Owner, Distribution Provider that owns a transmission Protection System.

Current Status:

The interpretation was posted for ballot until December 7, 2009. The interpretation is going to a recirculation ballot.

NERC Link:

[Interpretation PRC-004-1 and PRC-005-1](#)