PRC–004–AB1–1 Analysis and Mitigation of Transmission and Generation Protection System Misoperation

1. Purpose

The purpose of this reliability standard is to ensure all transmission and generation protection system misoperations affecting the reliability of the BES are analyzed and mitigated.

2. Applicability

This reliability standard applies to:

(a) the legal owner of a transmission facility;
(b) the legal owner of a generating unit that:
   (i) is not part of an aggregated generating facility;
   (ii) has a maximum authorized real power rating greater than four point five (4.5) MW;
   (iii) is directly connected to the transmission system or to transmission facilities within the City of Medicine Hat; and
   (iv) has protection systems that directly affect the reliability of the bulk electric system; these protection systems are those that measure voltage, current, or frequency from the generating unit to the interconnected electric system, but exclude the prime mover and associated control systems;
(c) the legal owner of an aggregated generating facility that:
   (i) is directly connected to the transmission system or to transmission facilities within the City of Medicine Hat;
   (ii) has a maximum authorized real power rating greater than four point five (4.5) MW; and
   (iii) has protection systems that directly affect the reliability of the bulk electric system; these protection systems are those that measure voltage, current, or frequency from the aggregated generating facility to the interconnected electric system; and
(d) the ISO.

3. Definitions

Italicized terms used in this reliability standard have the meanings as set out in the Consolidated Authoritative Document Glossary.
4. Requirements

R1 Each legal owner of a transmission facility, legal owner of a generating unit and legal owner of an aggregated generating facility must analyze its protection system misoperations and develop and implement a corrective action plan to avoid future misoperations of a similar nature.

R2 Each legal owner of a transmission facility, legal owner of a generating unit and legal owner of an aggregated generating facility must provide to the ISO documentation of its misoperations analyses and corrective action plans upon request by the ISO.

R3 The ISO must provide to WECC documentation of the misoperations analyses and corrective action plans upon request by WECC.

5. Processes and Procedures

No procedures have been defined for this reliability standard.

6. Measures

The following measures correspond to the requirements identified in Section 4 of this reliability standard. For example, MR1 is the measure for R1.

MR1 Evidence exists and shows analysis was completed and corrective action plans were implemented as specified in requirement R1.

MR2 Evidence that analysis reports and corrective action plans were submitted as specified in requirement R2 (e.g. email confirmation).

MR3 Confirmation that documentation as specified in requirement R3 was received by WECC or evidence that requests for confirmation were made.

7. Appendices

No appendices have been defined for this reliability standard.

8. Guidelines

No guidelines have been defined for this reliability standard.

Revision History

<table>
<thead>
<tr>
<th>Effective</th>
<th>Description</th>
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<tbody>
<tr>
<td>2013-01-02</td>
<td>Administrative update – “TFO” and “GFO” replaced with “legal owner of a transmission facility”, “legal owner of a generating unit” and “legal owner of an aggregated generating facility”; and other minor clean up items.</td>
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<tr>
<td>2010-02-11</td>
<td>New Issue</td>
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