

Stakeholder Comment Form

Alberta Reliability Standards Process – October 2009

Proposed New Alberta Reliability Standards

Date of Request for Comment: August 13, 2009
Period of Consultation: August 13 through September 14, 2009

Comments From: _____ IPPSA _____
Date: __September 14, 2009_____
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Reliability Standard Number	Description	Stakeholder Comments
IRO-006-WECC-AB-1	Qualified Transfer Path Unscheduled Flow Relief	No comments – this standard applies to the ISO only.
PRC-001-AB-1	Protection System Coordination	<p>Reporting requirements and timelines for reporting or exchanging information specified in this standard, PRC-016-AB-0 and PRC-004-WECC-AB-1 should be harmonized wherever possible.</p> <p>The acronym GOP is undefined and is not defined in Part 1 of the ISO Rules. Can the AESO explain the staggered implementation dates for the various requirements? R.1 is in effect 365 days following Commission approval. R 2-9 is effective 10 days following Commission approval.</p> <p>Requirement R1 – The requirement specifies operating personnel must each be familiar with the purpose and limitations of protection system schemes applied in its area. However the term operating personnel could be interpreted to cover a broad range of people. The requirement should be revised to better define and narrow the operating personnel or positions that are covered by this requirement.</p> <p>The AESO also sets a requirement for GFO to act should a circumstance “reduce</p>

		<p>system reliability”. It would be important for the AESO to define what this means.</p> <p>Measure MR1 – Basic relaying training may not familiarize staff with the protection schemes operating on their equipment. Training should be in familiarizing staff in the types of protection schemes and RAS that are used on their facilities and the logic of how these schemes are expected to operate.</p> <p>Requirement R2.1 – The failure of relays or protection is often not apparent until the protection is called upon to operate. R2.1 should be modified to read, “If a protective relay or any equipment of a protection system of a generating unit described below fails when called upon to operate, ...”</p> <p>Requirement R2.1 and R2.2 adds the clause, “and such failure reduces transmission system reliability,...”. It can be argued that any failure reduces transmission system reliability. What constitutes a failure that reduces transmission reliability is not defined. The requirement as written implies that the GFO or TFO must make a judgment call of whether “such failure reduces transmission system reliability” In recognition of this, the requirement should be modified to read, “and, in the opinion of the GFO or TFO, such failure significantly reduces transmission system reliability...”.</p> <p>Protection operations (particularly those that occur on a weekend) may take several days to be reviewed and analyzed. Failures may not be immediately apparent and it may only be after analysis that the GFO or TFO determines that the failure reduces transmission system reliability. For this reason, the requirement in R2.1 and R2.2 to notify the TFO and/or ISO of the failure should be changed to say, “notify the TFO in its area and the ISO as soon as possible but no longer than six working days after such a failure is confirmed by GFO/TFO staff.” (This is consistent with requirements R3 of PRC-004-WECC-AB-1) The TFO and/or ISO should also be required to notify any GFO’s that may be affected by reduced transmission system reliability.</p> <p>MR4 and MR5 are overly prescriptive of what constitutes evidence. As it is now written, evidence will always include a revised fault analysis study, letter of agreement on settings, and notifications of changes. The wording of MR4 and MR5 should be revised to read, “Evidence exists, and <u>may</u> include revised fault analysis</p>
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		<p>study, letters of agreement on settings, and notifications of changes, all of which meets the requirements specified in R4/R5”. We believe this change better reflects NERC’s original language.</p> <p>Requirement R6.1 indicates that “Each GFO must identify changes in each of its generation, load, or operating conditions that may require changes in protection systems of others, and notify the ISO in advance of its their changes.” However, a GFO may have no visibility of changes in the load. In recognition of this, the GFO should only have to identify changes in its station service load and not load for which it has no visibility or control.</p> <p>The advance notice required in R6.1, R6.2, and R6.3 is not adequately defined. R6.1 simply says the notice is in advance. R6.3 states the TFO is to provide “reasonable prior notice to the ISO”. The ability to provide advance notice may vary with the circumstances. R6.1, R6.2 and R6.3 should be revised to indicate “and make reasonable efforts to notify the ISO of changes as far in advance as possible”.</p> <p>In requirement R8, “each GOP must provide reasonable prior notice to the TFO and ISO of proposed changes to the arming status of any RAS in its their facility. As discussed above, reasonable prior notice is not well defined. The requirement should change to ”make reasonable efforts to notify the ISO of changes as far in advance as possible”.</p>
PRC-004-AB-1	Analysis and Mitigation of Transmission and Generation Protection System Misoperation	<p>This standard and PRC-004-WECC-AB-1 have overlapping purposes. The difference in the purpose between the two standards should be clearly articulated.</p> <p>The acronym GOP is undefined and is not defined in Part 1 of the ISO Rules.</p>
PRC-004-WECC-AB-1	Protection System and Remedial Action Scheme Misoperation	<p>This standard, PRC-016-AB-0 and PRC-004-AB-1 have overlapping purposes. The difference in the purpose between the standards should be clearly articulated</p> <p>Reporting requirements and timelines for reporting or exchanging information specified in this standard, PRC-016-AB-0 and PRC-001-AB-1 should be harmonized wherever possible.</p>

		<p>The acronym GOP is undefined and is not defined in Part 1 of the ISO Rules.</p> <p>The ISO should take a more active role than the proposed standard specifies in the analysis and corrective action taken for misoperations of RAS schemes on specified transmission paths. RAS schemes are generally designed by the ISO and may include equipment installed at facilities owned by different entities. RAS may operate correctly (in terms of signals received and actions taken) but at the same time operate in an unintended manner. The intent of the RAS is best known by the ISO. Operations of RAS should be reviewed by the ISO to ensure they operated as intended.</p> <p>RAS that are no longer needed but remain in service could adversely affect reliability and unnecessarily curtail economic dispatches in the market. The ISO should undertake an annual review of the continued need for installed RAS and remove those that are no longer needed.</p> <p>It should be made clear that the requirements of this standard apply to protection schemes and RAS on specified transmission paths only.</p> <p>Whenever there is an operation of a RAS that is associated with a specified transmission path, the requirements for analysis for misoperation or unintended operation and responsibility to initiate corrective action should extend to the ISO as well as the relevant TFO and GFO. This requirement for the ISO to review RAS operations and initiate corrective action should be incorporated in R1, R1.1, R1.2 and R2 of this standard.</p> <p>FEPS and FERAS are defined in the NERC standard but not in the ISO's proposed standard.</p>
PRC-005-AB-1	Transmission and Generation Protection System Maintenance and Testing	Requirement R1.1 specifies Documented maintenance and testing intervals and the rationale for them. This should be clarified to indicate that the rationale applies to the intervals chosen as opposed to the maintenance chosen. Suggested wording is "Documented rationale for the intervals chosen for maintenance and testing."

<p>PRC-016-AB-0</p>	<p>Remedial Action Scheme Misoperations</p>	<p>This standard and PRC-004-WECC-AB-1 have overlapping purposes. The difference in the purpose between the two standards should be clearly articulated.</p> <p>Reporting requirements and timelines for reporting or exchanging information specified in this standard, PRC-004-WECC-AB-1 and PRC-001-AB-1 should be harmonized wherever possible.</p> <p>The ISO should take a more active role than the proposed standard specifies in the analysis and corrective action taken for misoperations of RAS schemes. RAS schemes are generally designed by the ISO and may include equipment installed at facilities owned by different entities. RAS may operate correctly (in terms of signals received and actions taken) but at the same time operate in an unintended manner. The intent of the RAS is best known by the ISO. Operations of RAS should be reviewed by the ISO to ensure they operated as intended.</p> <p>RAS that are no longer needed but remain in service could adversely affect reliability and unnecessarily curtail economic dispatches in the market. The ISO should undertake an annual review of the continued need for installed RAS and remove those that are no longer needed.</p> <p>For the reasons discussed above, the ISO may be in the best position to ascertain whether a RAS misoperated, operated correctly, operated in an unintended way, or whether the RAS is no longer needed. In recognition of this, requirement R1 should be amended to say TFOs, GFOs, WOs, and ISO must each analyze RAS operations and determine if the RAS operated correctly and in the way intended. R2 should include a requirement for the ISO to maintain records of RAS misoperations. Similarly, R3 should include a requirement for the ISO to take corrective actions if it has determined there was a misoperation or unintended operation or that the RAS is no longer needed.</p> <p>The role of the ISO in Requirement R5 should be expanded from simply forwarding information to the WECC. The ISO should review the information it receives from TFOs, GFOs and WOs, and add the ISO's analysis to this information and coordinate the corrective action plans between entities.</p>
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Please return this form with your comments by September 14, 2009, to:

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