

**Stakeholder Comment & AESO Replies Matrix**

**Alberta Reliability Standards  
November 16, 2009**

**Date of Request for Comment:** August 13, 2009  
**Stakeholder Consultation Period:** August 13 – September 14, 2009

<b>1.1 – PRC-001-AB-1</b>		
<b>Stakeholder</b>	<b>Stakeholder Comment</b>	<b>AESO Response</b>
<b><u>Capital Power Corporation</u></b>	<p>1. With respect to R1 and M1, Capital Power would like the AESO to clarify that operators are only required to receive training regarding the purpose and limitations of protection schemes specific to the equipment located in their area of operation within the facility.</p>	<p>1. In our view the wording of R1 and MR1 is consistent with your comment. MR1 has also been modified to address another comment received.</p>
<b><u>TransAlta</u></b>	<p>1. The standard shows Applicability to both GFOs and GOPs. The NERC version of the standard shows applicability to just Generator Operators. TransAlta requests clarification from the AESO as to how they are assigning responsibility to this standard, as well as many others. TransAlta's recent understanding is that the GFO standards will, from this point forward, cover the Generator Owner requirements only and that the Generator Operator requirements would be solely assigned to the GOP classification. We believe this provides more clarity in the case where the owner and the operator of a generating plant are different. If this change is not made, and the GFO includes both the Generator Owner and Generator Operator standards, and a standard is assigned to both a GFO and a GOP then the division of requirements between the owner and the operator of the asset will be difficult to determine. For this reason we would recommend that this standard be applicable to just Generator Operators, and not GFO's. Additionally, we would recommend that all GFO standards be changed to include just the Generator Owner standards which may mean making any associated changes that may result if some of the applicability needs to be assigned to the GOP. This comment will follow through to a number of the requirements in the standard as well where either GFO or GOP is mentioned in the requirement itself.</p>	<p>1. The AESO assigns applicability on a requirements basis based on advice from the ARC work group assigned to review the standard. This makes it possible for a standard to contain requirements that are applicable to GOPs and GFOs; however, no requirement is assigned to both GOP and GFO. Requirements applicable to GOP generally relate to real time and near real time operation of generating facilities with GFO applicability relating to technical matters often involving equipment.</p> <p>The AESO will modify R7 to require TFOs to provide notice to GOPs rather than GFOs.</p>

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	<p>2. R8 states “Each GOP must provide reasonable prior notice to the TFO . . .”. We would propose striking the word reasonable as it is subjective term.</p>	<p>2. We have considered your request, however we are of the view that not including “reasonable” may result in the objective of this requirement not being met. In our view “reasonable” provides an appropriate standard.</p>
<p><b><u>IPPSA</u></b></p>	<p>1. 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>2. The acronym GOP is undefined and is not defined in Part 1 of the ISO Rules.</p> <p>3. 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>1. We agree. However, the reports specified in PRC-001-AB-0, PRC-004-WECC-AB-1 and PRC-016-AB-0 are different in scope and accordingly harmonizing the requirements and timelines would not work in this instance.</p> <p>2. Through the Transition of Authoritative Documents (TOAD) project, the AESO proposes to rationalize various terms used for “generator operator” and “generator owner” in ISO rules and reliability standards. This rationalization, which will include establishing definitions will follow the ISO Rules process. We anticipate proceeding with this initiative in the near future. Therefore the acronym GOP will not be defined separately through the Alberta Reliability Standards project.</p> <p>3. As described in the “reason for difference” of the Comparison Document, the ISO, TFOs and GFOs have all requested additional time to implement an operational staff training program and prepare documentation as required. The ISO, acting on the advice of the ARC technical work group, chose to delay the implementation of RI. The AESO acting on the advice of the</p>

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	<p>4. 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>5. The AESO also sets a requirement for GFO to act should a circumstance “reduce system reliability”. It would be important for the AESO to define what this means.</p> <p>6. 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>7. 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>ARC technical work group chose to implement R2- R9 as soon as possible as these requirements reflect most applicable entities current practice.</p> <p>4. The term “operating personnel” allows each applicable entity to determine which of its staff require training. MR1 also provides some additional clarity to whom this requirement applies to.</p> <p>5. The word “transmission” was added to the term “system reliability” to provide clarification from the NERC standard. R2.1 includes a statement about the type of generating unit protection systems this requirement applies to.</p> <p>Please note that the GOP has this responsibility, not the GFO.</p> <p>6. Agree. The AESO will modify this measure.</p> <p>7. The AESO agrees that failure of some protective relays will not be apparent until the protection is called upon to operate; however many protection systems are monitored for failures. The suggested wording does not account for monitored protection systems. To</p>
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	<p>8. 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>9. 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)</p> <p>10. 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>accommodate both situations, the AESO will modify R2.1 as follows:</p> <p>“If a protective relay or any equipment of a protection system of a generating unit described below is <u>known to have failed</u> and such failure reduces...”</p> <p>8. The AESO agrees that judgment is required to assess reduction in transmission system reliability; however your suggested wording does not consider that consultation involving the GFO or TFO and other entities may be required in order to determine whether a reduction in transmission system reliability has occurred. Therefore, to ensure this consultation is not ruled out, the AESO proposes to leave the requirement as written.</p> <p>9. The AESO will modify R2.1 R2.2 to:  <b>R2.1</b> Notify the TFO in its area and the ISO as soon as possible, but no longer than 24 hours after receiving knowledge of such failure.  <b>R2.2</b> Commence as soon as possible, and proceed diligently thereafter, to correct such failure.</p> <p>10. The requirements in R2, R2.1, R2.2 and R3 in this standard ensure the direction for communicating protection failures impacting transmission system reliability is from equipment owner and operator to transmission</p>
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	<p>11. 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 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>12. 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 <del>their</del> 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>13. 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>14. 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 <del>their</del> 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>	<p>reliability authorities.</p> <p>11. The AESO agrees and will revise the wording of M4 and M5 to: "evidence exists that could include but is not limited to..."</p> <p>12. R6.1 is not intended to apply to any load other than the GFO's own load. In that regard, the obligation on the GFO is to "identify changes" in its generation, its load and its operating conditions.</p> <p>13. The AESO has reviewed the proposed wording. The intent of these requirements is to provide prior notice to the ISO, not to make reasonable efforts to provide notice. Accordingly, we believe the wording proposed addresses this and the term "reasonable" is included to provide for the varying circumstances you noted.</p> <p>14. We have considered your request, however we are of the view that not including "reasonable" may result in the objective of this requirement not being met. In our view "reasonable" provides an appropriate standard.</p>
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		<p>We would also note that the intent of these requirements is to provide prior notice to the ISO, not to make reasonable efforts to provide notice. Accordingly, we believe the wording proposed addresses this and the term “reasonable” is included to provide for the varying circumstances you noted.</p>
<b><u>ATCO Power</u></b>	<p>R4 and M4 state that “each GFO must coordinate all new protection systems and all protection system changes with its interconnecting TFO and the AESO. Evidence exists including but not limited to, revised fault analysis study, letters of agreement on settings and notifications of changes”. ATCO Power believes the evidentiary requirement should allow for varying amounts of detail as appropriate based on the protection system being added or modified. Some changes to protection systems may not require a fault analysis study.</p>	<p>The AESO agrees and will revise the wording of M4 to: “evidence exists that could include but is not limited to....”</p>