



Stakeholder Comparison Comment Rationale Matrix

2010-07-22

AESO AUTHORITATIVE DOCUMENT PROCESS

Alberta Reliability Standard – EOP-008-AB-0 Plans for Loss of Control Centre Functionality

NOTE: The AESO is asking market participants to give an initial indication of their support for, or opposition to, the specific Alberta Reliability Standard variances to the NERC requirements referenced below. Such an initial indication assists in the AESO's practical understanding of the receptivity of the industry to the proposed changes, and in that regard the AESO thanks, in advance, all market participants who choose to respond. With regard to the specific standard changes and their implications, such responses are without prejudice to the rights of market participants under the Act, any regulations, or related decisions of the Commission.

Date of Request for Comment [yyyy/mm/dd]: 2010/07/22
Period of Consultation [yyyy/mm/dd]: 2010/07/22 through 2010/08/27
Comments From: TransAlta
Date [yyyy/mm/dd]: 2010/08/27

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Listed below is the summary of changes for the proposed new, removed or amended sections of the standard. Please refer back to the Letter of Notice under the "Attachments to Letter of Notice" section to view the proposed content changes to the standard. Please double-click on the check box for either "Support" or "Oppose" and/or place your comments, reasons for position, and alternate proposals underneath (if any).

**COMPARISON BETWEEN NERC EOP-008-0 AND ALBERTA EOP-008-AB-0
PLANS FOR LOSS OF CONTROL CENTRE FUNCTIONALITY**

NERC EOP-008-0	Alberta EOP-008-AB-0	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p>Purpose Each reliability entity must have a plan to continue reliability operations in the event its control center becomes inoperable.</p>	<p>Purpose The purpose of this reliability standard is to ensure that each reliability entity has a plan to continue reliability operations if its control center functionality is lost.</p>	<p>Clarified the purpose to align with the content of the reliability standard.</p>		
<p>Applicability 4.1. Transmission Operators. 4.2. Balancing Authorities. 4.3. Reliability Coordinators.</p>	<p>Applicability This reliability standard applies to:</p> <ul style="list-style-type: none"> • the operator of a transmission facility; and • - the ISO. 	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended to identify the responsible entities in Alberta.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p> <p>General Comment: Even though the entity 'Generator' is not specified in this standard, nor is a generator with a transmission interconnection, it is not appropriate that any generator be required to comply with this standard. This standard should only apply to 'traditional operators of transmission facilities', or those that operate large transmission systems, not a radial line used to connect a generator to the grid. More specific details provided below will show that it is very difficult and potentially very costly for generators to comply to these</p>	

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			<p>standards.</p> <p>- The bold term 'operator of a transmission facility' is not a recognized approved functional entity and therefore, there are currently no entities registered in this category. Before standards are approved with new categories of applicability, we believe those new categories should first go through stakeholder consultation and be approved as required. Subsequently, the AESO will need to change the functional entities in their registration criteria and have entities adjust their registration as required. Additionally, TransAlta would also like to understand how this new category of operator of a transmission facility maps with the legal owner of a transmission facility. TransAlta does not support approval of this standard until after these issues are addressed and parties have a chance to modify their registration if required.</p> <p>Any new definitions need to be discussed in a consultation process and be approved before</p>	

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			<p>being added to a standard.</p> <p>This standard should not be approved until it is clearly stated it does not apply to generators.</p>	

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<p>Effective Date April 1, 2005</p>	<p>Effective Date Ninety (90) days after the date the Commission approves it.</p>	<p>To allow a reasonable amount of time for Alberta entities to implement this Alberta Reliability Standard.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p> <p>General comment: A 90 day effective date assumes that all entities to which this standard applies already have maintenance and testing program in place. This in fact can not be guaranteed, nor were there any obligations to have such prior to the effective date of this standard. TransAlta recommends that the effective dates should allow enough time for an entity to develop the program as required and recommend an effective date of 180 days.</p>	
<p>R1. Each Reliability Coordinator, Transmission Operator and Balancing Authority shall have a plan to continue reliability operations in the event its control center becomes inoperable. The contingency plan</p>	<p>R1. The ISO and each operator of a transmission facility must have a plan to continue reliable operations if its primary control center functionality is lost. The plan must include the following:</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended for clarity and consistency.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for</i></p>	

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<p>must meet the following requirements:</p> <p>R1.1. The contingency plan shall not rely on data or voice communication from the primary control facility to be viable.</p> <p>R1.2. The plan shall include procedures and responsibilities for providing basic tie line control and procedures and for maintaining the status of all inter-area schedules, such that there is an hourly accounting of all schedules.</p> <p>R1.3. The contingency plan must address monitoring and control of critical transmission facilities, generation control, voltage control, time and frequency control, control of critical substation devices, and logging of significant power system events. The plan shall list the critical facilities.</p> <p>R1.4. The plan shall include procedures and responsibilities for maintaining basic voice communication capabilities with other areas.</p>	<p>R1.1. provisions for continued operations that do not solely rely on data or voice communication from the primary control centre.</p> <p>R1.2. for the ISO, intertie operation and scheduling procedures and responsibilities for maintaining the status of interchange schedules, such that there will be an hourly accounting of all interchange schedules.</p> <p>R1.3. for each operator of a transmission facility responsible for intertie control, procedures and responsibilities for intertie control and for maintaining the status of net scheduled interchange.</p> <p>R1.4. procedures for monitoring and control of vital transmission facilities, automatic generation control, voltage control, time and frequency control, control of vital substation devices and for logging of significant system events.</p> <p>R1.5 a list of or reference to all vital transmission facilities.</p>	<p>Alberta Variance: Sub-requirement R1.1 was amended to allow for the use of data or voice communication if the reason for evacuation does not affect the performance of equipment.</p> <p>Alberta Variance: Sub-requirement R1.2 was divided into two requirements (R1.2 and R1.3) to delineate the responsibilities of the ISO and an operator of a transmission facility.</p> <p>Alberta Variance: Sub-requirement R1.3 was divided into two requirements (R1.4 and R1.5) to delineate between ongoing operations and system events.</p>	<p><i>position, and alternate proposal (if any).</i></p> <p>Generators who have transmission interconnections do not have ‘control centers’, they have a primary ‘control room’ which is strictly used for control of the generation asset including the generation interconnection facilities (GIF). If the generator is unable to continue operation from their control room, the generator will disconnect from the Bulk Electric System (BES) thus removing any risk to the reliability of the BES.</p> <p>R1.4 – It is not clear how a generator would be able to comply with this requirement. It is unclear how voltage control and time and frequency control, for instance would apply to a GIF. Additionally, a generator has no visibility of the system and therefore can not monitor significant system events. In order for a generator to gain visibility of the system in order to log significant system events, monitoring equipment would need</p>	

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<p>R1.5. The plan shall include procedures and responsibilities for conducting periodic tests, at least annually, to ensure viability of the plan.</p> <p>R1.6. The plan shall include procedures and responsibilities for providing annual training to ensure that operating personnel are able to implement the contingency plans.</p>	<p>R1.6. procedures and responsibilities for maintaining voice communication capabilities.</p> <p>R1.7. procedures and responsibilities for conducting periodic tests of the plan, at least once per calendar year.</p> <p>R1.8. procedures and responsibilities for provide training at least once per calendar year to ensure that operating personnel are able to implement the plan.</p>	<p>Alberta Variance: Sub-requirements R1.7, R1.8 were changed from annually to once per calendar year to align with the approach taken in other related Alberta reliability standards.</p>	<p>to be installed in the control room at a very significant cost.</p> <p>Additionally, it is not clear what the term 'vital' means.</p> <p>Alberta Variance 1.3 Comment: TransAlta is unsure what is intended and requests the AESO to clarify the comment..</p> <p>R1.5 – The words' or reference to' should be removed as it does not make this requirement clearer.</p> <p>R1.5 – TransAlta is unsure why only vital transmission facilities are mentioned in this requirement. R1.4 also mentions vital substations, should they not also be included? TransAlta suggests using the approach in the NERC version of the standard which simply states "The plan shall list the critical facilities".</p> <p>R1.6 TransAlta questions the removal of the word 'basic' from this requirement and requests AESO to explain this. Additionally, TransAlta suggests it is more descriptive to state "voice</p>	

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			communication capabilities with other areas". This is more specific than just voice communication capabilities".	
<p>R1.7. The plan shall be reviewed and updated annually.</p>	<p>R2. The ISO and each operator of a transmission facility must review and update their respective plans as specified in requirement R1 at least once per calendar year.</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended to for clarity and consistency.</p> <p>Changed annually to once per calendar year to align with the approach taken in other related Alberta reliability standards.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p>R1.8. Interim provisions must be included if it is expected to take more than one hour to implement the contingency plan for loss of primary control facility</p>	<p>R3. The ISO and each operator of a transmission facility must include interim provisions in the plan as required in requirement R1 if it is expected to take more than one (1) hour to implement the plan for loss of primary control centre.</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended for clarity and consistency.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p> <p>As stated in our comments for R1 above, generators who have transmission interconnections do not have 'control centers', they have a primary 'control room' which is strictly used for control of</p>	

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			<p>the generation asset and any generation interconnection facilities (GIF). If the generator is unable to continue operation from their control room, the generator will disconnect from the BES thus removing any risk to the reliability of the BES.</p>	
	<p>MR1. A documented plan exists and includes all applicable elements specified in sub-requirements R1.1 to R1.8.</p> <p>MR1.1 Evidence exists that communications are in place and do not rely on the primary control centre as specified in requirement R1.1.</p> <p>MR1.2 Procedures and responsibilities exist in the plan as specified in requirement R1.2</p> <p>MR1.3 Procedures and responsibilities exist in the plan as specified requirement R1.3.</p> <p>MR1.4 Procedures exist as specified in requirement R1.4.</p> <p>MR1.5 A list of or reference to vital transmission facilities exists as</p>	<p><input checked="" type="checkbox"/> New <input type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Added to align with requirement R1 and its sub-requirements.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p> <p>MR1.1 – TransAlta would like AESO to clarify what ‘evidence’ looks like in this situation. It is schematics, lists of telecommunication equipment etc.</p> <p>MR1.5 – The words’ or reference to’ should be removed as it does not make this measurement clearer.</p> <p>MR1.6 – The term “technical requirements” should be struck. The term is vague and provides no guidance as to what is required</p>	

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	<p>specified in requirement R1.5.</p> <p>MR1.6 Procedures exist and meet technical requirements as specified in requirement R1.6.</p> <p>MR1.7 Testing procedures exist and meet requirements as specified in requirement R1.7.</p> <p>MR1.8 Training records exist to show that the ISO and each operator of a transmission facility conducted training as specified in requirement R1.8.</p>		<p>to ensure compliance. If in fact there are specific technical requirements the should be specifically stated in the requirement.</p> <p>MR1.1 to MR1.6 does not add clarity or value. TransAlta recommends AESO use the NERC M1. This would help to simplify the standard. AESO has stated that R1 and all associated sub requirements were amended for clarity and consistency, but in fact TransAlta believes that it is now more difficult to read. We recommend using the NERC measure and just change the effected entities.</p> <p>TransAlta sees no value in the large number of measures that are defined for each sub requirement given that they simply provide a reference back to the sub requirement but no additional guidance as to what is required. TransAlta therefore recommends that MR1 should be reworded as suggested below and that all of the remaining measures for the sub requirements be removed.</p>	

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			<p>Proposed wording for MR1. Evidence that the ISO and each operator of a transmission facility has developed and documented a current contingency plan to continue the monitoring and operation of the electrical equipment under its control to maintain Bulk Electrical System reliability if its primary control facility becomes inoperable.</p>	
	<p>MR2. Evidence exists that the ISO and each operator of a transmission facility have reviewed and updated their respective plans as specified in requirement R2.</p>	<p><input checked="" type="checkbox"/> New <input type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Added to align with requirement R2.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p>M1. Evidence that the Reliability Coordinator, Transmission Operator or Balancing Authority has developed and documented a current contingency plan to continue the monitoring and operation of the electrical equipment under its control to maintain Bulk Electrical System reliability if its primary control facility becomes inoperable.</p>	<p>MR3. Interim provisions exist in the plan, as specified in requirement R3.</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended to align with requirement R3.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p>Compliance</p>				

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To view the compliance section D of the NERC reliability standard follow this link: http://www.nerc.com/files/EOP-008-0.pdf		The Alberta reliability standards do not contain a compliance section. Compliance with all Alberta reliability standards is completed in accordance with the Alberta Reliability Standards Compliance Monitoring Program, available on the AESO website at: http://www.aeso.ca/loadsettlement/17189.html .		
Regional Differences None identified.	None identified.	Not applicable in Alberta		

Definitions	Comments	Rationale and/or Alternate Proposal
(a) New NA		
(b) Removals N/A		
(c) Amendments N/A		