



Stakeholder Comparison Comment Rationale Matrix

2010-07-22

AESO AUTHORITATIVE DOCUMENT PROCESS

Alberta Reliability Standard – PRC-017-AB-0 Remedial Action Scheme Maintenance and Testing

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]: <u>2010/07/22</u>	Contact: <u>Karina Muniz</u>
Period of Consultation [yyyy/mm/dd]: <u>2010/07/22</u> through <u>2010/08/27</u>	Phone: <u>403-267-5963</u>
Comments From: <u>AltaLink Management Ltd.</u>	E-mail: <u>karina.muniz@altalink.ca</u>
Date [yyyy/mm/dd]: <u>2010/08/27</u>	

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 PRC-017-0 AND ALBERTA PRC-017-AB-0
REMEDIAL ACTION SCHEME MAINTENANCE AND TESTING**

NERC PRC-017-0	Alberta PRC-017-AB-0	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p>Purpose To ensure that all Special Protection Systems (SPS) are properly designed, meet performance requirements, and are coordinated with other protection systems. To ensure that maintenance and testing programs are developed and misoperations are analyzed and corrected.</p>	<p>Purpose The purpose of this reliability standard is to ensure adequate maintenance and testing of RASs and equipment integral to RASs.</p>	<p>Clarified the purpose to align with the content of the reliability standard.</p>		
<p>Applicability 4.1. Transmission Owner that owns an SPS 4.2. Generator Owner that owns an SPS 4.3. Distribution Provider that owns an SPS</p>	<p>Applicability This reliability standard applies to:</p> <ul style="list-style-type: none"> • TFOs that own a RAS or equipment integral to a RAS that is listed as either an AB RAS or WECC RAS in the ISO RAS database as published on the AESO website, and as may be amended from time to time by the AESO on notice to market participants. • GFOs that own a RAS or equipment integral to a RAS that is listed as either an AB RAS or WECC RAS in the ISO RAS database as published on the AESO website, and as may be amended from time to time by the AESO on notice to market participants. • WOs that own a RAS or equipment integral to a RAS that 	<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>Identified the remedial action scheme classification that applies to this standard and referenced the ISO RAS database that identifies the classification of each remedial action scheme.</p> <p>The Alberta Reliability Standards section of the AESO website, and in particular the section that contains this reliability standard, will contain reference to the ISO RAS database. The ISO RAS database is currently available on the AESO website,</p>	<p><input type="checkbox"/> Support <input checked="" type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p> <p><i>AltaLink recommends that the wording be adjusted to outline or reference a process for revising the list, as per R1, that includes a stakeholder consultation activity and adds an appropriate effective date to allow TFOs and GFOs enough time to adopt any changes in requirements or revisions to the referenced list.</i></p>	

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	<p>is listed as either an AB RAS or WECC RAS in the ISO RAS database as published on the AESO website, and as may be amended from time to time by the AESO on notice to market participants.</p> <ul style="list-style-type: none"> • the ISO 	<p>under current Alberta Reliability Standard PRC-001-AB-1 Protection System Coordination.</p>		

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<p>Effective Date April 1, 2005</p>	<p>Effective Date One hundred and eighty (180) days after the date of approval by the Commission.</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>AltaLink recommends the effective date to be at least 365 calendar days because a number of the RAS involve significant coordination between different entities and it will take considerable effort to develop the required documentation and testing programs.</i></p> <p><i>In addition, AltaLink recommends that the RAS classification criteria and list are appropriately vetted through stakeholder consultation before this standards gets filed to the Commission.</i></p> <p><i>Altalink also recommends a staged implementation such that the WECC RAS are completed prior to Alberta RAS and then followed by Safety</i></p>	

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			<i>nets and Local Area Protection Schemes (LAPS).</i>	
<p>R1. The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall have a system maintenance and testing program(s) in place. The program(s) shall include:</p> <p>R1.1. SPS identification shall include but is not limited to:</p> <p>R1.1.1. Relays.</p> <p>R1.1.2. Instrument transformers.</p> <p>R1.1.3. Communications systems, where appropriate.</p> <p>R1.1.4. Batteries.</p> <p>R1.2. Documentation of maintenance and testing intervals and their basis.</p> <p>R1.3. Summary of testing procedure.</p> <p>R1.4. Schedule for system testing.</p> <p>R1.5. Schedule for system maintenance.</p> <p>R1.6. Date last tested/maintained.</p>	<p>R1 Each TFO, GFO, and WO, or any combination thereof, that owns a RAS or equipment integral to a RAS must have RAS maintenance and testing program(s) in place. These programs must:</p> <p>R1.1 identify the equipment integral to each RAS including:</p> <ul style="list-style-type: none"> • relays; • instrument transformers; • communications systems, where appropriate; • batteries; and <p>Other equipment as required for the RAS to function.</p> <p>R1.2 have documentation of maintenance and testing intervals and the basis for setting these intervals</p> <p>R1.3 have a summary of testing procedures for each type of equipment identified in requirement R1.1</p> <p>R1.4 have a schedule for testing RAS and each type of equipment</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended for clarity and consistency.</p> <p>Alberta Variance: In order to capture all components that make up a remedial action scheme, the identification of other equipment as required for the remedial action scheme to function was added to the list of items in requirement R1.1.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose</p> <p><i>Same as above.</i></p>	

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	<p>identified in requirement R1.1</p> <p>R1.5 have a schedule(s) for maintaining RAS and each type of equipment identified in requirement R1.1</p> <p>R1.6 identify the date the RAS and each type of equipment identified in requirement R1.1 was last tested and maintained</p>			
	<p>R2 Each TFO, GFO, and WO that owns a RAS or equipment integral to a RAS must, as of the effective date of this reliability standard, maintain and test each RAS or components of a RAS in accordance with its maintenance and testing program(s) as required by requirement R1.</p>	<p><input checked="" type="checkbox"/> New <input type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Added to for clarity that implementation of maintenance and testing programs for RAS is to occur on a go forward basis from the effective date of this reliability standard.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose</p> <p><i>Same as above.</i></p> <p><i>AltaLink recommends changes to requirement so that it is consistent with R1.</i></p> <p><i>Examples: R1.4 states 'have a schedule for testing RAS and each type or equipment identified in requirement R1.1'.</i></p> <p><i>R1.5 states 'have a schedule(s) for maintaining RAS and each</i></p>	

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			<p><i>type of equipment identified in requirement R1.1'.</i></p> <p><i>However, R2 states that 'maintain and test each RAS <u>or</u> components of a RAS...'</i></p>	
<p>R2. The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall provide documentation of the program and its implementation to the appropriate Regional Reliability Organizations and NERC on request (within 30 calendar days).</p>	<p>R3 Each TFO, GFO, and WO that owns a RAS or equipment integral to a RAS must provide documentation of the existence and implementation of its RAS maintenance and testing program(s) as required in requirement R1 within twenty (20) days of receiving a written request from the ISO.</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Alberta Variance: Sub-requirement R3 amended for Alberta participants to provide documentation to the ISO as the compliance monitor for TFOs, WOs and demand customers and upon receiving a written request from the ISO.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose</p> <p><i>AltaLink believes it should say 30 days so that it is consistent with other standards, such as in FAC-003-AB-1.</i></p>	
	<p>R4 The ISO must maintain and publish a list of all RASs to which this reliability standard applies.</p>	<p><input checked="" type="checkbox"/> New <input type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Alberta Variance: Sub-requirement R4 added for the ISO to maintain and publish a list of relevant remedial action schemes so that the Alberta entities were notified of which</p>	<p><input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p> <p><i>Altalink has no comment on ISO requirements.</i></p>	

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		requirements applied to which remedial action schemes.		
<p>M1. The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall have a system maintenance and testing program(s) in place that includes all items in Reliability Standard PRC-017-0_R1.</p>	<p>MR1 Written RAS maintenance and testing program(s) exists and includes all the elements as identified in sub-requirements of requirement R1.</p> <p>MR1.1 A written RAS maintenance and testing program exists that specifies all equipment as identified in requirement R1.1.</p> <p>MR1.2. A written RAS maintenance and testing program exists which specifies maintenance and testing intervals and the basis for setting those intervals.</p> <p>MR1.3 A summary of testing procedures exists in the written RAS maintenance and testing program that specifies the test procedures for each type of equipment identified in sub-requirement, R1.1.</p> <p>MR1.4 A written RAS maintenance and testing program includes testing schedules for each RAS and each type of equipment identified in requirement R1.1.</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended to align with requirement R1.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose</p> <p><i>Same as R.1</i></p>	

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	<p>MR1.5 A written RAS maintenance and testing program includes maintenance schedules for each RAS and each type of equipment identified in requirement R1.1.</p> <p>MR1.6 Evidence exists of the date the RAS and each type of equipment identified in requirement R1.1 was last tested and maintained.</p>			
	<p>MR2 All records of RAS testing and maintenance, created after the effective date of this reliability standard exist and are complete, accurate and consistent with the maintenance and testing program(s) as required in requirement R1.</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 checked="" type="checkbox"/> Oppose</p> <p><i>Same as R.2.</i></p>	
<p>M2. The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall have evidence it provided documentation of the program and its implementation to the appropriate Regional Reliability Organizations and NERC on request (within 30 calendar days).</p>	<p>MR3 Confirmation that documentation of the existence and implementation of the RAS maintenance and testing program(s) was provided within the timelines 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 checked="" type="checkbox"/> Oppose</p> <p><i>Same as R.3.</i></p>	
	<p>MR4 A list exists and is published that identifies all RASs as required in requirement R4.</p>	<p><input checked="" type="checkbox"/> New <input type="checkbox"/> Amended <input type="checkbox"/> Deleted</p>	<p><input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	

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		Added to align with requirement R4.	<i>Altalink has no comment on ISO requirements.</i>	
Compliance To view the compliance section D of the NERC reliability standard follow this link: http://www.nerc.com/files/PRC-017-0.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		