



Stakeholder Comparison Comment Rationale Matrix

2010-07-22

AESO AUTHORITATIVE DOCUMENT PROCESS

Alberta Reliability Standard – PRC-011-AB-0 UVLS 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]: 2010/07/22
Period of Consultation [yyyy/mm/dd]: 2010/07/22 through 2010/08/27
Comments From: AltaLink Management Ltd.
Date [yyyy/mm/dd]: 2010/08/27

Contact: Karina Muniz
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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 PRC-011-0 AND ALBERTA PRC-011-AB-0
UVLS MAINTENANCE AND TESTING**

NERC PRC-011-0	Alberta PRC-011-AB-0	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p>Purpose Provide system preservation measures in an attempt to prevent system voltage collapse or voltage instability by implementing an Undervoltage Load Shedding (UVLS) program.</p>	<p>Purpose The purpose of this reliability standard is to ensure adequate maintenance and testing of UVLS.</p>	<p>Clarified the purpose to align with the content of the reliability standard.</p>		
<p>Applicability 4.1. Transmission Owner that owns a UVLS system 4.2. Distribution Provider that owns a UVLS system</p>	<p>Applicability This reliability standard applies to:</p> <ul style="list-style-type: none"> • TFOs that own a UVLS that is listed as a UVLS 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 UVLS that is listed as a UVLS 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 • demand customers that own a UVLS that is listed as a UVLS 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 • 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>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, under current Alberta Reliability Standard PRC-001-AB-1 Protection System Coordination.</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> <p><i>AltaLink is currently not identified as an UVLS owner as per the current list. If the list changes such that AltaLink is identified as so, AltaLink will</i></p>	

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			<i>require sufficient time to meet the requirements.</i>	
<p>Effective Date April 1, 2005</p>	<p>Effective Date Ninety (90) 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 checked="" type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p> <p><i>See comments in the Applicability section.</i></p>	
<p>R1. The Transmission Owner and Distribution Provider that owns a UVLS system shall have an UVLS equipment maintenance and testing program in place. This program shall include:</p> <p>R1.1. The UVLS system identification which shall include but is not limited to:</p> <p>R1.1.1. Relays. R1.1.2. Instrument transformers. R1.1.3. Communications systems, where appropriate. 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 Each TFO, WO, or demand customer that owns a UVLS must have a UVLS equipment maintenance and testing program in place. This program must:</p> <p>R1.1 Identify the UVLS and associated equipment which includes:</p> <ul style="list-style-type: none"> • relays; • instrument transformers; • communications systems, where appropriate; • batteries; and • any other equipment where appropriate. <p>R1.2 have documentation of maintenance and testing intervals and the basis for setting these</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended for clarity and consistency and to identify the responsible entities in Alberta.</p> <p>In order to capture all components, the identification of other equipment as required was added to the list of items in sub-requirement R1.1.</p>	<p><input type="checkbox"/> Support <input checked="" type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p> <p><i>See comments in the Applicability section.</i></p>	

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<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>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 UVLS and each type of equipment identified in requirement R1.1</p> <p>R1.5 have a schedule for maintaining UVLS and each type of equipment identified in requirement R1.1</p> <p>R1.6 identify the date the UVLS and each type of equipment identified in requirement R1.1 was last tested and maintained</p>			
	<p>R2 Each TFO, WO, and demand customer that owns a UVLS must, as of the effective date of this reliability standard, maintain and test each UVLS in accordance with its UVLS equipment maintenance and testing program as required by requirement R1.</p>	<p><input checked="" type="checkbox"/> New <input type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Added to identify requirements of the responsible entities in Alberta and for clarity and consistency.</p> <p>Alberta Variance: Sub-requirement R2 added to provided clarification that implementation of maintenance and testing programs for UVLS is to</p>	<p><input type="checkbox"/> Support <input checked="" type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p> <p><i>See comments in the Applicability section.</i></p>	

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		occur on a go forward basis from the effective date of this reliability standard.		
<p>R2. The Transmission Owner and Distribution Provider that owns a UVLS system shall provide documentation of its UVLS equipment maintenance and testing program and the implementation of that UVLS equipment maintenance and testing program to its Regional Reliability Organization and NERC on request (within 30 calendar days).</p>	<p>R3 Each TFO, WO, and demand customer that owns a UVLS must provide documentation of the existence and implementation of its UVLS equipment maintenance and testing program 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>Amended to identify requirements of the responsible entities in Alberta and for clarity and consistency.</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 upon reviewing a written request from the ISO.</p>	<p> <input type="checkbox"/> Support <input checked="" type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose </p> <p><i>See comments in the Applicability section.</i></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 UVLS 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: Added requirement R4 for the ISO to maintain and publish a list of all UVLS to which this Proposed Reliability Standard applies so that the Alberta entities were notified of which requirements applied to which Under Voltage Load Shed.</p>	<p> <input type="checkbox"/> Support <input checked="" type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose </p> <p><i>See comments in the Applicability section.</i></p>	

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<p>M1. Each Transmission Owner and Distribution Provider that owns a UVLS system shall have documentation that its UVLS equipment maintenance and testing program conforms with Reliability Standard PRC-011-0_R1.</p>	<p>MR1 A written UVLS equipment maintenance and testing program exists and includes all the elements as identified in the sub-requirements of R1.</p> <p>MR1.1 A written UVLS equipment maintenance and testing program exists that identifies the UVLS and associated equipment as specified in requirement R1.1.</p> <p>MR1.2 A written UVLS equipment maintenance and testing program exists that 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 UVLS equipment maintenance and testing program that specifies the test procedures for each type of equipment identified in requirement R1.1.</p> <p>MR1.4 A written UVLS equipment maintenance and testing program includes testing schedules for each UVLS 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 and its sub-requirements.</p>	<p><input type="checkbox"/> Support <input checked="" type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p> <p><i>See comments in the Applicability section.</i></p>	

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	<p>MR1.5 A written UVLS equipment maintenance and testing program includes maintenance schedules for each UVLS and each type of equipment identified in requirement R1.1.</p> <p>MR1.6 Evidence exists of the date the UVLS and each type of equipment identified in requirement R1.1 was last tested and maintained.</p>			
	<p>MR2 All records of UVLS equipment testing and maintenance, created after the effective date of this reliability standard, exist and are complete, accurate and consistent with the UVLS equipment maintenance and testing program 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 checked="" type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p> <p><i>See comments in the Applicability section.</i></p>	
<p>M2. Each Transmission Owner and Distribution Provider that owns a UVLS system shall have evidence it provided documentation of its UVLS equipment maintenance and testing program and the implementation of that UVLS equipment maintenance and testing program as specified in Reliability Standard PRC-011-0_R2.</p>	<p>MR3 Confirmation that documentation of the existence and implementation of the UVLS equipment maintenance and testing program 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 checked="" type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p> <p><i>See comments in the Applicability section.</i></p>	
	<p>MR4 A list exists and is published that identifies all UVLS as required in requirement R4.</p>	<p><input checked="" type="checkbox"/> New <input type="checkbox"/> Amended</p>	<p><input type="checkbox"/> Support <input checked="" type="checkbox"/> Support with language suggestions</p>	

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		<input type="checkbox"/> Deleted Added to align with requirement R4.	<input type="checkbox"/> Oppose <i>See comments in the Applicability section.</i>	
Compliance To view the compliance section D of the NERC reliability standard follow this link: http://www.nerc.com/files/PRC-011-0.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		

