



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]: <u>2010/07/22</u>	Contact: <u>Jerry Mossing</u>
Period of Consultation [yyyy/mm/dd]: <u>2010/07/22</u> through <u>2010/08/27</u>	Phone: <u>403-539-2496</u>
Comments From: <u>Capital Power Corporation</u>	E-mail: <u>ars_comments@ieso.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-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 type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose </p> <p>The equipment being contemplated under this standard is clearly for the benefit of providing last resort system preservation measures and, therefore, should be recovered as a system cost. For TFOs, the costs associated with the undervoltage load shedding (UVLS) program would be recoverable under the tariff. For demand customers, the AESO has been clear that the costs associated with system projects would not be considered a participant-related cost. We ask the AESO to confirm that the cost of the obligation to shed load as part of the UVLS program would</p>	

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			be considered a system-related cost and also be recovered through the AESO tariff.	
<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 type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose </p> <p>A 90 day effective date assumes that all entities to which this standard applies already have documentation of a maintenance and testing program in place. This can not be guaranteed since there were not any obligations to have such documentation prior to the effective date of this standard. The effective date for this standard should be aligned with that of PRC-017-AB-0 (180 days) as the requirements of each are similar.</p>	
<p>R1. The Transmission Owner and Distribution Provider that owns a UVLS system shall have a UVLS equipment maintenance and testing program in place. This program shall include:</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</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> <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</i></p>	

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<p>R1.1. The UVLS system identification which 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>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 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>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><i>any).</i></p>	

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	<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 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>Capital Power does not support the AESO's decision to add Requirement 2 to the NERC version of this Reliability Standard for application in Alberta.</p> <p>R2 simply states that market participants will be required to implement the program described in R1 and maintain the evidence for R1 as of the effective date of the standard. This is duplicative of both R1 and the effective date section. R1 states that the responsible entity "must have a UVLS equipment maintenance and testing programs in place." The term "in place" already implies that the program must also be implemented so it does not need to be repeated in R2. The evidence required for R1.6 is documentation of the tests and maintenance performed on each type of equipment. This evidence would be the same for R2 which</p>	

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			<p>provides further evidence of an overlap.</p> <p>The only additional information provided in R2 is that testing and maintenance records only need to be stored as of the effective date of the standard. While Capital Power appreciates the additional clarity provided by this statement, this information should be included in the Effective Date section of the standard rather than creating an additional requirement and therefore an additional risk of non-compliance for Alberta market participants.</p> <p>The AESO has stated that, where possible, there should be symmetry between the NERC and Alberta versions of Reliability Standards. In keeping with this guidance, additional requirements such as this section should not be added unnecessarily.</p>	
<p>R2. The Transmission Owner and Distribution Provider that owns a UVLS system shall provide documentation of its UVLS equipment maintenance and testing</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</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended to identify requirements of</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose</p>	

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<p>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>testing program as required in requirement R1 within twenty (20) days of receiving a written request from the ISO.</p>	<p>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>Capital Power requests that the AESO explain why the number of days to respond to a written request from the ISO has been reduced from 30 days in the NERC version of the standard to 20 days in the Alberta version? The data requested for this requirement is similar to that which would be requested for an audit. NERC responsible entities are notified 60 days in advance of a scheduled audit in order to provide responsible entities with enough notice to compile all the necessary documentation to prove their compliance. NERC's 30 days response requirement is already aggressive compared to the notification standard; the AESO's 20 day requirement is even more aggressive and will be difficult to comply with. We ask the AESO to reconsider this response requirement.</p> <p>It is unclear what data is required for R3 that would not have already been completed for R1. To the extent the data is the same, could the ISO not obtain the necessary information as part of a spot audit</p>	

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			at any time? In what instances would the ISO require information that could not be obtained by a spot audit?	
	<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 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. 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</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 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>	

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	<p>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>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</p>	<p><input checked="" type="checkbox"/> New <input type="checkbox"/> Amended</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language</p>	

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	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.	<input type="checkbox"/> Deleted Added to align with requirement R2.	suggestions <input type="checkbox"/> Oppose <i>Insert comments, reason for position, and alternate proposal (if any).</i>	
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.	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.	<input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted Amended to align with requirement R3.	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose Capital Power does not support MR3 as currently written. MR3 states that in order to demonstrate compliance the market participant must have a "Confirmation" that the testing and maintenance program was provided within the specified timelines. It is unreasonable and unfair to require market participants to be responsible for the actions of another party, in this case the AESO. It is not appropriate to place an obligation on a market participant that would put it at risk of being found non-compliant if the AESO does not provide the requested confirmation. Particularly where the standard does not explicitly	

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			<p>require that the AESO provide the confirmation. The NERC version of the standard only requires the generator owner to provide evidence that the information was submitted. This is all that a market participant can reasonably be responsible for.</p> <p>Capital Power has voiced this and similar concerns with reliability standards being drafted in such a way that market participants become responsible for actions that are beyond their control. When this standard was discussed at the working group prior to public consultation, these issues were raised by Capital Power and other participants. We have also provided comments on this issue in consultation on VAR-002-AB-1, MOD-010&012-AB-1, and PRC-017-AB-0.</p> <p>Question 6 of the Alberta Reliability Standards Compliance Frequently Asked Questions provides some clarification about compliance obligations with respect to confirmations but it does not go far enough. The</p>	

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			<p>AESO's response states:</p> <p><i>"A registered entity that is unsuccessful in obtaining a confirmation letter must provide a) written evidence (e.g. emails and replies) that they have made a reasonable request for a confirmation letter, b) written evidence that they have escalated the request at least once, and c) any correspondence from the request, and d) the contact information (e.g. name, email, organization, phone number) of the person/party that has not responded. The registered entity will not be out of compliance to the standard if reasonable actions have been made to get a confirmation letter."</i></p> <p>The standards should be drafted clearly and endeavor to align the compliance effort with the purpose of the standard. The Purpose section of this standard specifies that the intent is to ensure adequate maintenance and testing of UVLS and equipment integral to UVLS. The intent is not to initiate a potentially lengthy and</p>	

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			<p>administratively burdensome process of obtaining confirmations from the AESO. We are unclear if this confirmation is even required to fulfill the purpose of the standard. Market participants should be able to verify whether or not a data request was responded to within a specified timeframe without requiring confirmation from the ISO.</p> <p>The FAQ significantly increases the obligation of market participants to maintain documentation as market participants must satisfy a, b, c <i>and</i> d to demonstrate reasonable actions to avoid non-compliance.</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 <input type="checkbox"/> Deleted</p> <p>Added to align with requirement R4.</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>	

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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		