

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.

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| <p>Date of Request for Comment [yyyy/mm/dd]: <u>2010/07/22</u></p> <p>Period of Consultation [yyyy/mm/dd]: <u>2010/07/22</u> through <u>2010/08/27</u></p> <p>Comments From: <u>Suncor Energy</u></p> <p>Date [yyyy/mm/dd]: <u>2010/08/27</u></p> | <p>Contact: <u>Jerry Mossing</u></p> <p>Phone: <u>403-539-2496</u></p> <p>E-mail: <u>ars_comments@aeso.ca</u></p> |
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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 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><i>Suncor recommends that the information published on the AESO website should be captured in the body of this binding Standard for clarity. We would like to see stakeholders being made aware of all changes to the RAS list in advance to facilitate a 2-3 year period to comply with the requirements and book the capital improvements necessary. Furthermore, since Suncor is of the opinion that a UVLS system is of obvious benefit to the BES, it should thus be classified as a</i></p> | |

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| | | | <p><i>system cost and recovered in this manner.</i></p> <p><i>Suncor would like to suggest as well that the ISO RAS database be versioned and dated, so as to indicate the last time it was modified. This will assist registered entities to find out if there were any changes made that could cause them to be non-compliant.</i></p> | |

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| <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><i>A 90 day effective date assumes that all entities to which this standard applies already have a maintenance and testing program in place. Suncor recommends that the effective dates should allow enough time for an entity to develop the program and implement capital upgrades as required and recommend an effective date of 2-3 years for new additions.</i></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>R1.1. The UVLS system identification which shall include but is not limited to:</p> <p>R1.1.1. Relays. R1.1.2. Instrument transformers.</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 | <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</p> | <p> <input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose </p> <p><i>Suncor is concerned that, in the manner the requirements are currently worded, a single infraction could incur multiple penalties and requests that the AESO amend the wording of sub-requirements accordingly.</i></p> | |

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| <p>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>R1.4. Schedule for system testing.</p> <p>R1.5. Schedule for system maintenance.</p> <p>R1.6. Date last tested/maintained.</p> | <p>appropriate;</p> <ul style="list-style-type: none"> • 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>items in sub-requirement R1.1.</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</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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| | UVLS in accordance with its UVLS equipment maintenance and testing program as required by requirement R1. | <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>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 type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose</p> <p><i>The vast majority of Alberta Reliability Standards operate with a 30 day lead time for information requests. Suncor would prefer a 30 day lead time. What is the AESO's case for more stringent application? Suncor does not feel that there is a pressing and substantial objective which would necessitate a more stringent timeframe.</i></p> | |
| | <p>R4 The ISO must maintain and</p> | <p><input checked="" type="checkbox"/> New</p> | <p><input type="checkbox"/> Support</p> | |

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| | publish a list of all UVLS to which this reliability standard applies. | <input type="checkbox"/> Amended <input type="checkbox"/> Deleted 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. | <input checked="" type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose <i>Suncor recommends that this requirement be rewritten to state: 'The ISO must maintain and publish the ISO RAS database and notify effective entities of any changes'. AESO needs to indicate that sufficient time be given to new affected entities in order to become compliant. (See above comment on effective date.)</i> | |
| 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. | MR1 A written UVLS equipment maintenance and testing program exists and includes all the elements as identified in the sub-requirements of R1. MR1.1 A written UVLS equipment maintenance and testing program exists that identifies the UVLS and associated equipment as specified in requirement R1.1. MR1.2 A written UVLS equipment maintenance and testing program exists that specifies maintenance | <input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted Amended to align with requirement R1 and its sub-requirements. | <input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose <i>Suncor is concerned that MR1.1 through MR1.6 could cause a situation where a single infraction would result in multiple penalties. We recommend using the NERC measure and amend the wording to include the affected entities and equipment.</i> Suncor believes that a single, | |

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| | <p>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><i>adequately worded measure which accurately captures the requirements of R1.1 through R1.6 is preferable to 6 measures.</i></p> <p><i>In the alternative, if the measures are to remain separate for each sub-requirement, Suncor requests that the wording be uniform throughout the sub-measures, such as, "UVLS and associated equipment as specified in requirement R1.1." or "for each type of equipment identified in requirement R1.1." Consistency in the wording allows market participants and the AESO to better understand and assess what constitutes compliance.</i></p> | |
| | <p>MR2 All records of UVLS equipment testing and maintenance, created after the effective date of this reliability standard, exist and are</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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| | complete, accurate and consistent with the UVLS equipment maintenance and testing program as required in requirement R1. | Added to align with requirement R2. | | |
| <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>Suncor supports the use of confirmation as a “mirror and curtain” for compliance in that:</p> <ul style="list-style-type: none"> - it accurately reflects the documentation retained by the AESO and market participant; and - the AESO need not look behind the confirmation letter to establish good compliance. <p>The use of “existence” as a predicate is insufficient for the purposes of this measure. A market participant could simply offer “Our UVLS equipment maintenance and testing program exists and was implemented” as documentation of its existence, to say nothing of what it entails. It would add no value to simply refer to the program and state to the AESO that it <i>is</i>. Suncor recommends simply replacing “<i>of the existence and</i>” with “<i>and a</i></p> | |

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| | | | <i>record of</i> " in this measure. | |
| | MR4 A list exists and is published that identifies all UVLS as required in requirement R4. | <input checked="" type="checkbox"/> New <input type="checkbox"/> Amended <input type="checkbox"/> Deleted Added to align with requirement R4. | <input type="checkbox"/> Support <input checked="" type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose <i>Suncor recommends that MR4 be rewritten as follows: Confirmation exists that the ISO notified effective entities of any changes in the ISO RAS database and, further, that they maintain and publish the ISO RAS database as required in MR4.</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 | | |

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