



**Stakeholder Comparison Comment Rationale Matrix**

**2010-08-17**

**AESO AUTHORITATIVE DOCUMENT PROCESS**

**Alberta Reliability Standard – PRC-008-AB-0 Underfrequency Load Shedding Equipment Maintenance Programs**

*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>2010/08/17</u> Period of Consultation [yyyy/mm/dd]: <u>2010/08/17</u> through <u>2010/09/17</u> Comments From: <u>TransCanada Energy Ltd. (“TransCanada”)</u> Date [yyyy/mm/dd]: <u>Sept 17, 2010</u>	Contact: <u>Chris Best</u> Phone: <u>403-920-2081</u> E-mail: <u>chris_best@transcanada.com</u>
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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-008-0 AND ALBERTA PRC-008-AB-0  
UNDERFREQUENCY LOAD SHEDDING EQUIPMENT MAINTENANCE PROGRAMS**

NERC PRC-008-0	Alberta PRC-008-AB-0	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p><b>Purpose</b> Provide last resort system preservation measures by implementing an Under Frequency Load Shedding (UFLS) program.</p>	<p><b>Purpose</b> The purpose of this <b>reliability standard</b> is to provide last resort <b>system</b> preservation measures by implementing an <b>underfrequency load shedding</b> program.</p>	<p>Clarified the purpose to align with the content of the reliability standard.</p>		
<p><b>Applicability</b> 4.1. Transmission Owner required by its Regional Reliability Organization to have a UFLS program 4.2. Distribution Provider required by its Regional Reliability Organization to have a UFLS program</p>	<p><b>Applicability</b> This <b>reliability standard</b> applies to:</p> <ul style="list-style-type: none"> <li>the <b>legal owner</b> of a <b>transmission facility</b> who owns equipment as part of an <b>underfrequency load shedding</b> program; and</li> <li>a <b>market participant</b> receiving service under <i>Rate DTS</i> who has an obligation to shed <b>load</b> as part of an <b>underfrequency load shedding</b> program.</li> </ul>	<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>Currently the UFLS program is implemented through OPP 804 Off-Nominal Frequency Load Shedding and Restoration. The Alberta Reliability Standards section of the AESO website, and in particular the section that contains this reliability standard, will contain reference to OPP 804 as a related authoritative document.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p> <p>TransCanada is concerned that the reference to OPP 804 could lead to a situation where a market participant is subject to sanction twice for the same action. TransCanada encourages the AESO to ensure requirements are only in one place, either the reliability standard or the OPP.</p>	
<p><b>Effective Date</b> April 1, 2005</p>	<p><b>Effective Date</b> One hundred and eighty (180) <b>days</b> after the date the <b>Commission</b> approves it.</p>		<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	

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			<i>Insert comments, reason for position, and alternate proposal (if any).</i>	
<p><b>R1.</b> The Transmission Owner and Distribution Provider with a UFLS program (as required by its Regional Reliability Organization) shall have a UFLS equipment maintenance and testing program in place. This UFLS equipment maintenance and testing program shall include UFLS equipment identification, the schedule for UFLS equipment testing, and the schedule for UFLS equipment maintenance.</p>	<p><b>R1</b> Each <b>legal owner and market participant</b> must have an <b>underfrequency load shedding</b> equipment maintenance and testing program that identifies <b>underfrequency load shedding</b> equipment and includes schedule(s) for maintenance and testing.</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"/> <b>Oppose</b> </p> <p>Throughout this standard the term “<b>legal owner and market participant</b>” has been used, presumably in reference to the entities defined in the applicability section. This is unclear and could lead to confusion in interpreting these requirements in the future. TransCanada suggests defining the entities as “applicable entities” in the applicability section and then utilizing that term in the requirements and measures.</p> <p>The NERC requirement has been split into three Alberta requirements which increases a market participant’s work and risk beyond the scope of</p>	

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			<p>the NERC requirement. The following suggestion would be aligned with the NERC wording.</p> <p>“R1 The applicable entities shall have a UFLS equipment maintenance and testing program in place. This UFLS equipment maintenance and testing program shall include UFLS equipment identification, the schedule for UFLS equipment testing, and the schedule for UFLS equipment maintenance.”</p>	
	<p><b>R2.</b> Subject to requirement R3, each <b>legal owner and market participant</b> must identify the date <b>underfrequency load shedding</b> equipment, identified in its <b>underfrequency load shedding</b> equipment maintenance and testing program, was last tested and maintained.</p>	<p><input checked="" type="checkbox"/> New  <input type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p><b>Alberta Variance:</b>  Requirement R2 was added to identify the date when UFLS equipment was last tested and maintained. This will establish a start date for the maintenance and testing intervals. Where the last tested date cannot be identified, the corresponding UFLS equipment are required to be tested over a three year period in accordance with new Alberta requirement R3.</p>		

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	<p><b>R3</b> Each <b>legal owner and market participant</b> that cannot identify the date that <b>underfrequency load shedding</b> equipment was last tested in their program, as required in requirement R2, must test any such equipment and record the date of such testing within thirty six (36) <b>months</b> of the effective date of this <b>reliability standard</b>, subject to the following:</p> <ul style="list-style-type: none"> <li>• must test, and record the date tested, a minimum of one third (1/3) of its <b>underfrequency load shedding</b> equipment that does not have a last tested date within twelve (12) <b>months</b> of the effective date of this <b>reliability standard</b>;</li> <li>• must test, and record the date tested, a minimum of two thirds (2/3) of its <b>underfrequency load shedding</b> equipment that does not have a last tested date within twenty four (24) <b>months</b> of the effective date of this <b>reliability standard</b></li> </ul>	<p><input checked="" type="checkbox"/> New  <input type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p><b>Alberta Variance:</b> Added requirement R3 to allow participants time to test those devices where test records (or other evidence) is not available, as required in R2.</p>		

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<p><b>R2.</b> The Transmission Owner and Distribution Provider with a UFLS program (as required by its Regional Reliability Organization) shall implement its UFLS equipment maintenance and testing program and shall provide UFLS maintenance and testing program results to its Regional Reliability Organization and NERC on request (within 30 calendar days).</p>	<p><b>R4</b> Each <b>legal owner and market participant</b> must, as of the effective date of this <b>reliability standard</b>, implement its <b>underfrequency load shedding</b> equipment maintenance and testing program required by requirement R1.</p> <p><b>R5</b> Each <b>legal owner and market participant</b> must provide documentation of the existence and implementation of its <b>underfrequency load shedding</b> equipment maintenance and testing program required in requirement R1 within thirty (30) <b>days</b> of receiving a written request from the <b>ISO</b>.</p>	<p><input type="checkbox"/> New  <input checked="" type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Amended to identify the responsible entities in Alberta and for clarity and consistency.</p> <p>NERC requirement has been split into two requirements to add clarity.</p> <p><b>Alberta Variance:</b> In Alberta requirement R5, participants will provide documentation to the AESO as the compliance monitor for legal owners of transmission facilities and market participants.</p>	<p><input type="checkbox"/> Support  <input checked="" type="checkbox"/> Support with language suggestions  <input type="checkbox"/> Oppose</p> <p>Splitting the NERC requirement into two Alberta requirements increases the risk and is not necessary for clarity. This could be left as one requirement, such as:</p> <p><b>R4</b> Each <b>legal owner and market participant</b> must, as of the effective date of this <b>reliability standard</b>, implement its <b>underfrequency load shedding</b> equipment maintenance and testing program required by requirement R1 and must provide documentation of the existence and implementation of its <b>underfrequency load shedding</b> equipment maintenance and testing program within thirty (30) <b>days</b> of receiving a written request from the <b>ISO</b>.</p>	

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<p><b>M1.</b> Each Transmission Owner's and Distribution Provider's UFLS equipment maintenance and testing program contains the elements specified in Reliability Standard PRC-008-0_R1.</p>	<p><b>MR1</b> Documentation of <b>underfrequency load shedding</b> equipment maintenance and testing program exists and includes elements as specified in requirement R1.</p>	<p><input type="checkbox"/> New  <input checked="" type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Alberta measure amended to align with requirement R1.</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><b>M2.</b> Each Transmission Owner and Distribution Provider shall have evidence that it provided the results of its UFLS equipment maintenance and testing program's implementation to its Regional Reliability Organization and NERC on request (within 30 calendar days).</p>	<p><b>MR2</b> Evidence exists of the date <b>underfrequency load shedding</b> equipment was last tested and maintained or where the date is unknown, measure MR3 applies.</p> <p><b>MR3</b> For <b>underfrequency load shedding</b> equipment without a date last tested as identified in requirement R2, evidence exists that there is a testing plan and the <b>legal owner</b> or <b>market participant</b>, as applicable, has implemented it as specified in requirement R3.</p> <p><b>MR4:</b> All records of <b>underfrequency load shedding</b> equipment maintenance and testing, created after the effective date of this <b>reliability standard</b> exist and are complete, accurate and consistent with the maintenance and testing program</p>	<p><input checked="" type="checkbox"/> New  <input type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Alberta measure added to align with requirement R2 and R5.</p>	<p><input type="checkbox"/> Support  <input checked="" type="checkbox"/> Support with language suggestions  <input type="checkbox"/> Oppose</p> <p>There is no reason to make the Alberta measure (MR5) more stringent than the NERC measure by requiring "confirmation" instead of "evidence". TransCanada recommends "confirmation" should be changed back to "evidence".</p>	

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	as required in requirement R1.  <b>MR5: Confirmation</b> that the <b>legal owner or the market participant</b> , as applicable, provided documentation of the existence and implementation of the <b>underfrequency load shedding</b> equipment maintenance and testing program within the timelines specified in requirement R3.			
<b>Compliance</b> To view the compliance section D of the NERC reliability standard follow this link: <a href="http://www.nerc.com/files/PRC-008-0.pdf">http://www.nerc.com/files/PRC-008-0.pdf</a>		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: <a href="http://www.aeso.ca/loadsettlement/17189.html">http://www.aeso.ca/loadsettlement/17189.html</a> .		
<b>Regional Differences</b> None identified.	None identified.	Not applicable in Alberta		

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

Definitions	Comments	Rationale and/or Alternate Proposal
<p><b>(c) Amendments</b></p> <p>N/A</p>		