



**Stakeholder Comparison Comment Rationale Matrix**

**2010-07-08**

**AESO AUTHORITATIVE DOCUMENT PROCESS**

**Alberta Reliability Standard – MOD-010&012-AB-0 Steady-State and Dynamic Data for Transmission System Modeling and Simulation**

*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>2010/07/08</u>	Contact: <u>Kevin Neithercut</u>
Period of Consultation [yyyy/mm/dd]: <u>2010/07/08</u> through <u>2010/08/08</u>	Phone: <u>403-514-1544</u>
Comments From: <u>ENMAX Power Corporation</u>	E-mail: <u>kneithercut@enmax.com</u>
Date [yyyy/mm/dd]: <u>2010/08/05</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 RELIABILITY STANDARDS (MOD-010-0 AND MOD-012-0) AND MOD-010&012-AB-0  
STEADY-STATE AND DYNAMIC DATA FOR TRANSMISSION SYSTEM MODELING AND SIMULATION**

NERC MOD-010-0 & MOD-012-0	Alberta MOD-010&012-AB-0	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p><b>Purpose</b> To establish consistent data requirements, reporting procedures, and system models to be used in the analysis of the reliability of the Interconnected Transmission Systems.</p>	<p><b>Purpose</b> The purpose of this reliability standard is to provide for the delivery of data and information necessary to establish consistent power flow and dynamic models to be used in the analysis of the reliability of the Interconnection.</p>	<p>Clarified the purpose to align with the content of the reliability standard.</p>		
<p><b>Applicability</b>  <b>MOD-010 4.1.</b> Transmission Owners specified in the data requirements and reporting procedures of MOD-011-0_R1  <b>MOD-010 4.2.</b> Transmission Planners specified in the data requirements and reporting procedures of MOD-011-0_R1  <b>MOD-010 4.3.</b> Generator Owners specified in the data requirements and reporting procedures of MOD-011-0_R1  <b>MOD-010 4.4.</b> Resource Planners specified in the data requirements and reporting procedures of MOD-011-0_R1  <b>MOD-012 4.1.</b> Transmission Owners specified in the data requirements and reporting procedures of MOD-013-0_R1  <b>MOD-012 4.2.</b> Transmission Planners specified in the data requirements and reporting procedures of MOD-013-0_R1  <b>MOD-012 4.3.</b> Generator Owners specified in the data requirements and reporting procedures of MOD-013-0_R1  <b>MOD-012 4.4.</b> Resource Planners specified in the data requirements and</p>	<p><b>Applicability</b> This reliability standard applies to:</p> <ul style="list-style-type: none"> <li>• GFOs</li> <li>• TFOs</li> <li>• ISO</li> </ul>	<p><input checked="" type="checkbox"/> New  <input type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>To identify the responsible entities in Alberta.</p> <p><b>Alberta Variance:</b> As a result of the similarity and commonality of the subject matter requirements and measures of NERC standards MOD-010-0 and MOD-012-0 they have been combined into one Alberta reliability standard MOD-010&amp;012-AB-0.</p>	<p><input checked="" 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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reporting procedures of MOD-013-0_R1				
<p><b>Effective Date</b> April 1, 2005</p>	<p><b>Effective Date</b> 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 checked="" 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>MOD-010 R1.</b> The Transmission Owners, Transmission Planners Generator Owners, and Resource Planners (specified in the data requirements and reporting procedures of MOD-011-0_R1) shall provide appropriate equipment characteristics, system data, and existing and future Interchange Schedules in compliance with its respective Interconnection Regional steady-state modeling and simulation data requirements and reporting procedures as defined in Reliability Standard MOD-011 0_R1.</p> <p><b>MOD-012 R1.</b> The Transmission Owners, Transmission Planners, Generator Owners, and Resource Planners (specified in the data requirements and reporting procedures of MOD-013-0_R1) shall provide appropriate equipment characteristics</p>	<p><b>R1.</b> Each TFO and GFO must provide equipment characteristics and system data to the ISO.</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>OPP 1306 Reporting Equipment Changes outlines the equipment characteristics and system data that must be provided in requirement R1.</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 OPP 1306 as a related authoritative document. This reference will inform applicable entities of the requirements for the provision of equipment characteristics and system data in both this reliability standard and OPP 1306.</p>	<p><input checked="" 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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NERC MOD-010-0 & MOD-012-0	Alberta MOD-010&012-AB-0	AESO Reason for Difference	Stakeholder Comments	AESO Replies
and system data in compliance with the respective Interconnection-wide Regional dynamics system modeling and simulation data requirements and reporting procedures as defined in Reliability Standard MOD-013-0_R1.				
	<p><b>R2.</b> The ISO, subject to requirement R3, must provide equipment characteristics, system data, dynamics system modeling, simulation data and existing and future interchange schedules to the WECC in compliance with the respective Interconnection-wide WECC steady-state and dynamics system modeling and simulation data requirements and reporting procedures.</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.</p> <p>The requirements for an “Area Coordinator” in the “WECC Data Preparation Manual For Power Flow and Stability Studies” are the current WECC requirements and reporting procedures as referred to in requirement R2.</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 appropriate WECC requirements and reporting procedures as referred to in requirement R2.</p>	<p><input checked="" 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>MOD-010 R2.</b> The Transmission Owners, Transmission Planners,</p>	<p><b>R3.</b> The ISO must provide the data and information specified in</p>	<p><input type="checkbox"/> New</p>	<p><input checked="" type="checkbox"/> Support  <input type="checkbox"/> Support with language</p>	

**COMPARISON BETWEEN NERC RELIABILITY STANDARDS (MOD-010-0 AND MOD-012-0) AND MOD-010&012-AB-0  
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<p>Generator Owners, and Resource Planners (specified in the data requirements and reporting procedures of MOD-011-0_R1) shall provide this steady-state modeling and simulation data to the Regional Reliability Organizations, NERC, and those entities specified within Reliability Standard MOD-011-0_R1. If no schedule exists, then these entities shall provide the data on request (30 calendar days).</p> <p><b>MOD-012 R2.</b> The Transmission Owners, Transmission Planners, Generator Owners, and Resource Planners (specified in the data requirements and reporting procedures of MOD-013-0_R1) shall provide dynamics system modeling and simulation data to its Regional Reliability Organization(s), NERC, and those entities specified within the applicable reporting procedures identified in Reliability Standard MOD-013-0_R1. If no schedule exists, then these entities shall provide data on request (30 calendar days).</p>	<p>requirement R2 according to the data bank compilation schedule published by the WECC; provided that if no such schedule exists, then such data and information must be provided no later than thirty (30) days from the date it is requested by the WECC.</p>	<p><input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended for clarity and consistency.</p>	<p>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><b>MR1.</b> Confirmation exists that data and information has been provided as specified in requirement R1.</p>	<p><input checked="" type="checkbox"/> New  <input type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Alberta measure added to align with requirement R1.</p>	<p><input checked="" 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>MR2.</b> Confirmation exists that data and information has been provided as specified in requirement R2.</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.</p>	<p><input checked="" 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>MOD-010 M1.</b> The Transmission Owner, Transmission Planner, Generator Owner, and Resource Planner, (specified in the data requirements and reporting procedures of MOD-011-0_R1) shall have evidence that it provided equipment characteristics, system data, and Interchange Schedules for steady-state modeling and simulation to the Regional Reliability Organizations and NERC as specified in Standard MOD-010-0_R1 and MOD-010-0_R2.</p> <p><b>MOD-012 M1.</b> The Transmission Owners, Transmission Planners, Generator Owners, and Resource</p>	<p><b>MR3</b> Confirmation exists that the data has been provided in accordance with the timelines specified in requirement R3.</p>	<p><input type="checkbox"/> New  <input checked="" type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Alberta measure amended to align with requirement R3.</p>	<p><input checked="" 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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<b>NERC MOD-010-0 &amp; MOD-012-0</b>	<b>Alberta MOD-010&amp;012-AB-0</b>	<b>AESO Reason for Difference</b>	<b>Stakeholder Comments</b>	<b>AESO Replies</b>
Planners (specified in the data requirements and reporting procedures of MOD-013-0_R1) shall each have evidence that it provided equipment characteristics and system data for dynamics system modeling and simulation in accordance with Reliability Standard MOD-012-0_R1 and Reliability Standard MOD-012-0_R2.				
<b>Compliance</b> To view the compliance section D of the NERC reliability standards follow these links: <a href="http://www.nerc.com/files/MOD-010-0.pdf">http://www.nerc.com/files/MOD-010-0.pdf</a> <a href="http://www.nerc.com/files/MOD-012-0.pdf">http://www.nerc.com/files/MOD-012-0.pdf</a>		There is no compliance section proposed in the Alberta Reliability Standards.  Compliance with all Alberta Reliability Standards is completed by the ISO in accordance with ISO Rule 12 ISO Compliance Monitoring.		
<b>Regional Differences</b> None identified.		Not applicable in Alberta		

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



**Existing Defined Terms Used in this Standard:**

(As included in the Consolidated Authoritative Document Glossary)

- Commission
- day
- generating facility owner (GFO)
- interchange schedule
- Interconnection
- ISO
- reliability
- reliability standard
- transmission facility owner (TFO)
- Western Electric Coordinating Council (WECC)