



**Stakeholder Comparison Comment Rationale Matrix**

**2010-08-05**

**AESO AUTHORITATIVE DOCUMENT PROCESS**

**Alberta Reliability Standard – IRO-005-AB-3 Reliability Coordination Current Day Operations**

*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>2010/08/05</u>	Contact: <u>Jerry Mossing</u>
Period of Consultation [yyyy/mm/dd]: <u>2010/08/05</u> through <u>2010/09/02</u>	Phone: <u>403-539-2496</u>
Comments From: <u>Capital Power Corporation</u>	E-mail: <u><a href="mailto:ars_comments@aesocanada.com">ars_comments@aesocanada.com</a></u>
Date [yyyy/mm/dd]: <u>2010/09/02</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 IRO-005-3 AND ALBERTA IRO-005-AB-3**

RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p><b>Purpose</b> The Reliability Coordinator must be continuously aware of conditions within its Reliability Coordinator Area and include this information in its reliability assessments. The Reliability Coordinator must monitor Bulk Electric System parameters that may have significant impacts upon the Reliability Coordinator Area and neighboring Reliability Coordinator Areas.</p>	<p><b>Purpose</b> The purpose of this <b>reliability standard</b> is to ensure that the <b>WECC</b> Reliability Coordinator is notified of <b>remedial action scheme</b> failures and that the lowest <b>system operating limits</b> are used between the <b>interconnected electric system</b> and adjacent <b>balancing authority areas</b>.</p>	<p>Clarified the purpose to align with the content of the reliability standard.</p>		
<p><b>Applicability</b> 4.1. Reliability Coordinators. 4.2. Balancing Authorities. 4.3. Transmission Operators. 4.4. Transmission Service Providers. 4.5. Generator Operators. 4.6. Load-Serving Entities. 4.7. Purchasing-Selling Entities.</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> that owns a <b>remedial action scheme</b> or equipment integral to a <b>remedial action scheme</b> that is listed as a WECC RAS in the <b>ISO's</b> RAS database as published on the AESO website, and as may be amended from time to time by the <b>ISO</b> on notice to <b>market participants</b>;</li> <li>the <b>operator</b> of a <b>transmission facility</b> that owns a <b>remedial action scheme</b> or equipment integral to a <b>remedial action scheme</b> that is listed as a <b>WECC RAS</b> in the <b>ISO's</b> RAS database as published on the AESO</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>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>None of the requirements in this standard apply to the legal owner of a transmission facility or the legal owner or a generation facility. Therefore these terms should be removed from the applicability section of the standard as their inclusion here creates confusion.</p> <p>Capital Power is concerned that the applicability section refers to entities that were not listed in the "ARS Functional Model and</p>	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**

RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
	<p>website, and as may be amended from time to time by the <b>ISO</b> on notice to <b>market participants</b>;</p> <ul style="list-style-type: none"> <li>• the <b>legal owner</b> of a <b>generating unit</b> that owns a <b>remedial action scheme</b> or equipment integral to a <b>remedial action scheme</b> that is listed as a WECC RAS in the <b>ISO's</b> RAS database as published on the AESO website, and as may be amended from time to time by the <b>ISO</b> on notice to <b>market participants</b>;</li> <li>• the <b>operator</b> of a <b>generating unit</b> that owns a <b>remedial action scheme</b> or equipment integral to a <b>remedial action scheme</b> that is listed as a WECC RAS in the <b>ISO's</b> RAS database as published on the AESO website, and as may be amended from time to time by the <b>ISO</b> on notice to <b>market participants</b>;</li> <li>• the <b>ISO</b>.</li> </ul>		<p>Criteria for Registration” and therefore no market participants are registered as such.</p> <p>The sudden change in the applicability of the standards creates confusion and inconsistency across standards. Market participants must be able to assess with certainty whether or not a standard or group of standards applies or will apply to them. Changing the functional entities to which the standard applies without formally communicating the change to stakeholders is inappropriate. The registration process should provide certainty to market participants regarding their compliance obligations and the AESO's audit process. Therefore, if the AESO is proposing to change the terms used in the applicability section of the standards it must be done prior to the approval of any standards that contain revised applicability terms. Matters of applicability could potentially have a significant impact on our business and therefore Capital Power would</p>	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**

RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
			greatly appreciate an opportunity to provide guidance and feedback to improve the reliability standards functional entity definitions and registration criteria.	
<p><b>Effective Date</b> In those jurisdictions where no regulatory approval is required, the standard shall become effective on the latter of either April 1, 2009 or the first day of the first calendar quarter, three months after BOT adoption. In those jurisdictions where regulatory approval is required, the standard shall become effective on the latter of either April 1, 2009 or the first day of the first calendar quarter, three months after applicable regulatory approval.</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>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 type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p><b>R1.</b> Each Reliability Coordinator shall monitor its Reliability Coordinator Area parameters, including but not limited to the following:</p> <p><b>R1.1.</b> Current status of Bulk Electric System elements (transmission or generation including critical auxiliaries such as Automatic Voltage Regulators and Special Protection Systems) and system loading.</p>		<p><input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted</p> <p>Amended for clarity and consistency.</p> <p><b>Alberta Variance:</b> NERC Requirement R1 and its sub-requirements apply to Reliability Coordinators and therefore is not applicable to any 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 any).</i></p>	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**  
RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p><b>R1.2.</b> Current pre-contingency element conditions (voltage, thermal, or stability), including any applicable mitigation plans to alleviate SOL or IROL violations, including the plan's viability and scope.</p> <p><b>R1.3.</b> Current post-contingency element conditions (voltage, thermal, or stability), including any applicable mitigation plans to alleviate SOL or IROL violations, including the plan's viability and scope.</p> <p><b>R1.4.</b> System real and reactive reserves (actual versus required).</p> <p><b>R1.5.</b> Capacity and energy adequacy conditions.</p> <p><b>R1.6.</b> Current ACE for all its Balancing Authorities.</p> <p><b>R1.7.</b> Current local or Transmission Loading Relief procedures in effect.</p> <p><b>R1.8.</b> Planned generation dispatches.</p> <p><b>R1.9.</b> Planned transmission or generation outages.</p> <p><b>R1.10.</b> Contingency events.</p>				

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**

RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p><b>R2.</b> Each Reliability Coordinator shall monitor its Balancing Authorities' parameters to ensure that the required amount of operating reserves is provided and available as required to meet the Control Performance Standard and Disturbance Control Standard requirements. If necessary, the Reliability Coordinator shall direct the Balancing Authorities in the Reliability Coordinator Area to arrange for assistance from neighboring Balancing Authorities. The Reliability Coordinator shall issue Energy Emergency Alerts as needed and at the request of its Balancing Authorities and Load-Serving Entities.</p>		<p><input type="checkbox"/> New  <input type="checkbox"/> Amended  <input checked="" type="checkbox"/> Deleted</p> <p><b>Alberta Variance:</b> NERC Requirement R2 applies to Reliability Coordinators and therefore is not applicable to any 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 any).</i></p>	
<p><b>R3.</b> Each Reliability Coordinator shall ensure its Transmission Operators and Balancing Authorities are aware of Geo-Magnetic Disturbance (GMD) forecast information and assist as needed in the development of any required response plans.</p>		<p><input type="checkbox"/> New  <input type="checkbox"/> Amended  <input checked="" type="checkbox"/> Deleted</p> <p><b>Alberta Variance:</b> NERC Requirement R3 applies to Reliability Coordinators and therefore is not applicable to any 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 any).</i></p>	
<p><b>R4.</b> The Reliability Coordinator shall disseminate information within its Reliability Coordinator Area, as required.</p>		<p><input type="checkbox"/> New  <input type="checkbox"/> Amended  <input checked="" type="checkbox"/> Deleted</p>	<p><input type="checkbox"/> Support  <input type="checkbox"/> Support with language suggestions  <input type="checkbox"/> Oppose</p>	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**  
RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
		<p><b>Alberta Variance:</b> NERC Requirement R4 applies to Reliability Coordinators and therefore is not applicable to any entities in Alberta.</p>	<p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p><b>R5.</b> Each Reliability Coordinator shall monitor system frequency and its Balancing Authorities' performance and direct any necessary rebalancing to return to CPS and DCS compliance. The Transmission Operators and Balancing Authorities shall utilize all resources, including firm load shedding, as directed by its Reliability Coordinator to relieve the emergent condition.</p>		<p> <input type="checkbox"/> New  <input type="checkbox"/> Amended  <input checked="" type="checkbox"/> Deleted         </p> <p><b>Alberta Variance:</b> NERC Requirement R5 was not included in this Alberta reliability standard as IRO-001-AB-1 R1 covers all WECC Reliability Coordinator directives to the ISO.</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>R6.</b> The Reliability Coordinator shall coordinate with Transmission Operators, Balancing Authorities, and Generator Operators as needed to develop and implement action plans to mitigate potential or actual SOL, CPS, or DCS violations. The Reliability Coordinator shall coordinate pending generation and transmission maintenance outages with Transmission Operators, Balancing Authorities, and Generator Operators as needed in both the real time and next-day reliability analysis timeframes.</p>		<p> <input type="checkbox"/> New  <input type="checkbox"/> Amended  <input checked="" type="checkbox"/> Deleted         </p> <p><b>Alberta Variance:</b> NERC Requirement R6 applies to Reliability Coordinators and therefore is not applicable to any 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 any).</i></p>	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**

RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p><b>R7.</b> As necessary, the Reliability Coordinator shall assist the Balancing Authorities in its Reliability Coordinator Area in arranging for assistance from neighboring Reliability Coordinator Areas or Balancing Authorities.</p>		<input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted  <b>Alberta Variance:</b> NERC Requirement R7 applies to Reliability Coordinators and therefore is not applicable to any entities in Alberta.	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose  <i>Insert comments, reason for position, and alternate proposal (if any).</i>	
<p><b>R8.</b> The Reliability Coordinator shall identify sources of large Area Control Errors that may be contributing to Frequency Error, Time Error, or Inadvertent Interchange and shall discuss corrective actions with the appropriate Balancing Authority. The Reliability Coordinator shall direct its Balancing Authority to comply with CPS and DCS.</p>		<input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted  <b>Alberta Variance:</b> NERC Requirement R8 applies to Reliability Coordinators and therefore is not applicable to any entities in Alberta.	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose  <i>Insert comments, reason for position, and alternate proposal (if any).</i>	
<p><b>R9.</b> Whenever a Special Protection System that may have an inter-Balancing Authority, or inter-Transmission Operator impact (e.g., could potentially affect transmission flows resulting in a SOL or IROL violation) is armed, the Reliability Coordinators shall be aware of the impact of the operation of that Special Protection System on inter-area flows. The Transmission Operator shall immediately inform the Reliability Coordinator of the status of</p>	<p><b>R1.</b> Any <b>operator</b> of a <b>generating unit</b> or a <b>transmission facility</b> must notify the <b>ISO</b>, as soon as practical, of any status change of a <b>remedial action scheme</b> that is listed as a WECC RAS in the <b>ISO's</b> RAS database and that results in, or may result in, the failure of the <b>remedial action scheme</b> to operate as designed.</p> <p><b>R2.</b> Subject to receipt of notification as specified under requirement R1,</p>	<input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted  Amended for clarity and consistency.  <b>Alberta Variance:</b> The first sentence of the NERC requirement R9 applies to Reliability Coordinators and therefore is not applicable to any entities in Alberta.	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose  <i>Insert comments, reason for position, and alternate proposal (if any).</i>	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**  
 RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p>the Special Protection System including any degradation or potential failure to operate as expected.</p>	<p>the <b>ISO</b> must notify the <b>WECC</b> Reliability Coordinator of such status change.</p>	<p><b>Alberta Variance:</b> NERC requirement R9 states that degradation of RAS is to be reported to the reliability coordinator, however it is the opinion of the AESO that degradation is not measurable. The AESO's opinion is that it is reasonable to notify the reliability coordinator of a RAS status change that results in the failure of a RAS to operate as designed, and the requirement has been written as such.</p> <p><b>Alberta Variance:</b> Split the NERC requirement R9 in two to separately identify market participant and AESO responsibilities.</p>		
<p><b>R10.</b> In instances where there is a difference in derived limits, the Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, and Purchasing-Selling Entities shall always operate the Bulk Electric System to the most limiting parameter.</p>	<p><b>R3.</b> If there is a difference in <b>system operating limits</b> on an <b>interconnection</b> between the <b>interconnected electric system</b> and an adjacent <b>balancing authority area</b>, the <b>ISO</b> must operate the <b>interconnected electric system</b> to the lowest of such <b>system operating limits</b>.</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 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>R11.</b> The Transmission Service Provider shall respect SOLs and IROLs in accordance with filed tariffs</p>		<p><input type="checkbox"/> New  <input type="checkbox"/> Amended  <input checked="" type="checkbox"/> Deleted</p>	<p><input type="checkbox"/> Support  <input type="checkbox"/> Support with language suggestions</p>	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**

RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p>and regional Total Transfer Calculation and Available Transfer Calculation processes.</p>		<p><b>Alberta Variance:</b> NERC requirement R11 implies separate entities for Transmission Service Provider and the entity that establishes SOLs and IROLs. As legislated by the <i>Electric Utilities Act</i>, the AESO is both the transmission service provider in Alberta (Section 17(g)) and is the responsible entity for calculating available transfer capability and total transfer capability through the establishment of SOLs and IROLs (17(h)). Therefore this requirement is redundant and not required to be included in this reliability standard.</p>	<p><input type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p><b>R12.</b> Each Reliability Coordinator who foresees a transmission problem (such as an SOL or IROL violation, loss of reactive reserves, etc.) within its Reliability Coordinator Area shall issue an alert to all impacted Transmission Operators and Balancing Authorities in its Reliability Coordinator Area without delay. The receiving Reliability Coordinator shall disseminate this information to its impacted Transmission Operators and Balancing Authorities. The Reliability Coordinator shall notify all</p>		<p><input type="checkbox"/> New  <input type="checkbox"/> Amended  <input checked="" type="checkbox"/> Deleted</p> <p><b>Alberta Variance:</b> NERC Requirement R12 applies to Reliability Coordinators and therefore is not applicable to any 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 any).</i></p>	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**

RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p>impacted Transmission Operators, Balancing Authorities, when the transmission problem has been mitigated.</p>				
<p><b>M1.</b> The Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, Energy Management System description documents, computer printouts, a prepared report specifically detailing compliance to each of the bullets in Requirement 1, EMS availability, SCADA data collection system communications performance or equivalent evidence that will be used to confirm that it monitors the Reliability Coordinator Area parameters specified in Requirements 1.1 through 1.9.</p>		<p> <input type="checkbox"/> New  <input type="checkbox"/> Amended  <input checked="" type="checkbox"/> Deleted             Deleted to align with the removal of NERC requirement R1         </p>	<p> <input type="checkbox"/> Support  <input type="checkbox"/> Support with language suggestions  <input type="checkbox"/> Oppose   <i>Insert comments, reason for position, and alternate proposal (if any).</i> </p>	
<p><b>M2.</b> If one of its Balancing Authorities has insufficient operating reserves, the Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to computer printouts, operating logs, voice recordings or transcripts of voice recordings, or equivalent evidence that will be used to determine if the Reliability Coordinator directed and, if needed, assisted the Balancing Authorities in the Reliability Coordinator Area to</p>		<p> <input type="checkbox"/> New  <input type="checkbox"/> Amended  <input checked="" type="checkbox"/> Deleted             Deleted to align with the removal of NERC requirement R2         </p>	<p> <input type="checkbox"/> Support  <input type="checkbox"/> Support with language suggestions  <input type="checkbox"/> Oppose   <i>Insert comments, reason for position, and alternate proposal (if any).</i> </p>	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**

RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
arrange for assistance from neighboring Balancing Authorities. (Requirement 2 and Requirement 7)				
<b>M3.</b> The Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, operator logs, voice recordings or transcripts of voice recordings, electronic communications or equivalent evidence that will be used to determine if it informed Transmission Operators and Balancing Authorities of Geo-Magnetic Disturbance (GMD) forecast information and provided assistance as needed in the development of any required response plans. (Requirement 3)		<input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted  Deleted to align with the removal of NERC requirement R3	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose  <i>Insert comments, reason for position, and alternate proposal (if any).</i>	
<b>M4.</b> The Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, operator logs, voice recordings or transcripts of voice recordings, Hot Line recordings, electronic communications or equivalent evidence that will be used to determine if it disseminated information within its Reliability Coordinator Area in accordance with Requirement 4.		<input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted  Deleted to align with the removal of NERC requirement R4	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose  <i>Insert comments, reason for position, and alternate proposal (if any).</i>	
<b>M5.</b> The Reliability Coordinator shall have and provide upon request		<input type="checkbox"/> New <input type="checkbox"/> Amended	<input type="checkbox"/> Support <input type="checkbox"/> Support with language	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**

RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p>evidence that could include, but is not limited to, computer printouts, operator logs, voice recordings or transcripts of voice recordings, electronic communications or equivalent evidence that will be used to confirm that it monitored system frequency and Balancing Authority performance and directed any necessary rebalancing, as specified in Requirement 5 Part 1.</p>		<p><input checked="" type="checkbox"/> Deleted</p> <p>Deleted to align with the removal of NERC requirement R5</p>	<p>suggestions <input type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p><b>M6.</b> The Transmission Operators and Balancing Authorities shall have and provide upon request evidence that could include, but is not limited to, operator logs, voice recordings or transcripts of voice recordings, electronic communications or equivalent evidence that will be used to confirm that it utilized all resources, including firm load shedding, as directed by its Reliability Coordinator, to relieve an emergent condition. (Requirement 5 Part 2)</p>		<p><input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted</p> <p>Deleted to align with the removal of NERC requirement R6</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>M7.</b> The Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, voice recordings or transcripts of voice recordings, electronic communications, operator logs or equivalent evidence that will be used to determine if it coordinated</p>		<p><input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted</p> <p>Deleted to align with the removal of NERC requirement R7</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>	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**  
RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p>with Transmission Operators, Balancing Authorities, and Generator Operators as needed to develop and implement action plans to mitigate potential or actual SOL, CPS, or DCS violations including the coordination of pending generation and transmission maintenance outages with Transmission Operators, Balancing Authorities and Generator Operators. (Requirement 6 Part 1)</p>				
<p><b>M8.</b> If a large Area Control Error has occurred, the Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, operator logs, voice recordings or transcripts of voice recordings, Hot Line recordings, electronic communications or equivalent evidence that will be used to determine if it identified sources of the Area Control Errors, and initiated corrective actions with the appropriate Balancing Authority if the problem was within the Reliability Coordinator's Area (Requirement 8 Part 1)</p>		<p> <input type="checkbox"/> New  <input type="checkbox"/> Amended  <input checked="" type="checkbox"/> Deleted   Deleted to align with the removal of NERC requirement R8 </p>	<p> <input type="checkbox"/> Support  <input type="checkbox"/> Support with language suggestions  <input type="checkbox"/> Oppose   <i>Insert comments, reason for position, and alternate proposal (if any).</i> </p>	
<p><b>M9.</b> If a Special Protection System is armed and that system could have had an inter-area impact, the Reliability Coordinator shall have and provide upon request evidence that</p>	<p><b>MR1.</b> Evidence exists that the <b>operator</b> notified the <b>ISO</b> as specified in requirement R1, such as voice recordings, electronic communications or other equivalent</p>	<p> <input type="checkbox"/> New  <input checked="" type="checkbox"/> Amended  <input type="checkbox"/> Deleted   Amended to align with requirements </p>	<p> <input type="checkbox"/> Support  <input type="checkbox"/> Support with language suggestions  <input type="checkbox"/> Oppose </p>	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**

RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p>could include, but is not limited to, agreements with their Transmission Operators, procedural documents, operator logs, computer analysis, training modules, training records or equivalent evidence that will be used to confirm that it was aware of the impact of that Special Protection System on inter-area flows. (Requirement 9)</p>	<p>evidence.</p> <p><b>MR2.</b> Evidence exists that the <b>ISO</b> notified the <b>WECC</b> Reliability Coordinator as specified in requirement R2, such as voice recordings, electronic communications or other equivalent evidence.</p>	<p>R1 and R2.</p>	<p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p><b>M10.</b> If there is an instance where there is a disagreement on a derived limit, the Transmission Operator, Balancing Authority, Generator Operator, Load-serving Entity, Purchasing-selling Entity and Transmission Service Provider involved in the disagreement shall have and provide upon request evidence that could include, but is not limited to, operator logs, voice recordings, electronic communications or equivalent evidence that will be used to determine if it operated to the most limiting parameter. (Part 2 of Requirement 10)</p>	<p><b>MR3.</b> Evidence exists that the ISO operated to the lowest <b>system operating limit</b> as specified in requirement R3, such as a record of voice recordings, electronic communications, operator logs, or other equivalent evidence exists to show that the ISO operated.</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 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>M11.</b> The Transmission Service Providers shall have and provide upon request evidence that could include, but is not limited to, procedural documents, operator logs,</p>		<p><input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted</p> <p>Deleted to align with the removal of</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**

RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p>voice recordings or transcripts of voice recordings, electronic communications or equivalent evidence that will be used to confirm that it respected the SOLs or IROLs in accordance with filed tariffs and regional Total Transfer Calculation and Available Transfer Calculation processes.(Requirement 11 Part 2)</p>		<p>NERC requirement R11.</p>	<p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p><b>M12.</b> The Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, operator logs, voice recordings or transcripts of voice recordings, electronic communications or equivalent evidence that will be used to confirm that it issued alerts when it foresaw a transmission problem (such as an SOL or IROL violation, loss of reactive reserves, etc.) within its Reliability Coordinator Area, to all impacted Transmission Operators and Balancing Authorities in its Reliability Coordinator Area as specified in Requirement 12 Part 1.</p> <p><b>M13.</b> The Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, operator logs, voice recordings or transcripts of voice</p>		<p> <input type="checkbox"/> New  <input type="checkbox"/> Amended  <input checked="" type="checkbox"/> Deleted         </p> <p>NERC Measures M12, M13, and M14 apply to Reliability Coordinators and therefore are not applicable to any 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 any).</i></p>	

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**

RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p>recordings, electronic communications or equivalent evidence that will be used to confirm that upon receiving information such as an SOL or IROL violation, loss of reactive reserves, etc. it disseminated the information to its impacted Transmission Operators and Balancing Authorities as specified in Requirement 12 Part 2.</p> <p><b>M14.</b> The Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, operator logs, voice recordings or transcripts of voice recordings, electronic communications or equivalent evidence that will be used to confirm that it notified all impacted Transmission Operators, Balancing Authorities and Reliability Coordinators when a transmission problem has been mitigated. (Requirement 12 Part 3)</p>				
<p><b>Compliance</b> To view the compliance section D of the NERC reliability standard follow this link: <a href="http://www.nerc.com/files/IRO-005-3.pdf">http://www.nerc.com/files/IRO-005-3.pdf</a></p>		<p>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</p>		

**COMPARISON BETWEEN NERC IRO-005-3 AND ALBERTA IRO-005-AB-3**  
 RELIABILITY COORDINATION CURRENT DAY OPERATIONS

NERC IRO-005-3	Alberta IRO-005-AB-3	AESO Reason for Difference	Stakeholder Comments	AESO Replies
		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		
<b>(c) Amendments</b> N/A		