



Date of Request for Comment [yyyy/mm/dd]: 2010/08/17
 Period of Consultation [yyyy/mm/dd]: 2010/08/17 through 2010/09/17

**COMPARISON BETWEEN NERC IRO-001-1.1 AND ALBERTA IRO-001-AB-1.1
 Reliability Coordination Responsibilities and Authorities**

NERC IRO-001-1.1	Final proposed IRO-001-AB-1.1	Reason for difference between IRO-001-AB-1.1 and NERC IRO-001-1.1	Stakeholder Comments (Insert comments here)	AESO Replies
<p>Purpose Reliability Coordinators must have the authority, plans, and agreements in place to immediately direct reliability entities within their Reliability Coordinator Areas to re-dispatch generation, reconfigure transmission, or reduce load to mitigate critical conditions to return the system to a reliable state. If a Reliability Coordinator delegates tasks to others, the Reliability Coordinator retains its responsibilities for complying with NERC and regional standards. Standards of conduct are necessary to ensure the Reliability Coordinator does not act in a manner that favors one market participant over another</p>	<p>Purpose The purpose of this reliability standard is to define the criteria by which the ISO must comply with directives issued by the WECC Reliability Coordinator-directives.</p>			
<p>Applicability</p>	<p>Applicability</p>	<p><input type="checkbox"/> New</p>	<p>ENMAX Power Corporation</p>	

<p>4.1. Reliability Coordinators. 4.2. Regional Reliability Organizations. 4.3. Transmission Operator. 4.4. Balancing Authorities. 4.5. Generator Operators. 4.6. Transmission Service Providers. 4.7. Load-Serving Entities. 4.8. Purchasing-Selling Entities.</p>	<p>This reliability standard applies to the following:</p> <ul style="list-style-type: none"> the ISO. 	<p><input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>The terms used to describe applicable entities in this reliability standard have been amended from the NERC version in order to correctly identify the applicable entities in Alberta and to align with terms included in the AESO <i>Consolidated Authoritative Documents Glossary</i>.</p>	<p><input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	
<p>Effective Date January 1, 2007</p>	<p>Effective Date Ninety (90) days after the date the Commission approves it. <u>July 1/October 1, 2012</u></p>	<p>To allow a reasonable amount of time for Alberta entities to implement this Alberta Reliability Standard.</p>	<p>ENMAX Power Corporation <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	
<p>R1. Each Regional Reliability Organization, subregion, or interregional coordinating group shall establish one or more Reliability Coordinators to continuously assess transmission reliability and coordinate emergency operations among the operating entities within the region and across the regional boundaries.</p>		<p><input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted</p> <p>NERC requirement R1 applies to the Regional Reliability Organization. This requirement is not applicable in Alberta.</p>	<p>ENMAX Power Corporation <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	

<p>R2. The Reliability Coordinator shall comply with a regional reliability plan approved by the NERC Operating Committee.</p>		<p> <input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted </p> <p>NERC requirement R2 applies to the WECC Reliability Coordinator. This requirement is not applicable in Alberta.</p>	<p>ENMAX Power Corporation</p> <p> <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose </p>	
<p>R3. The Reliability Coordinator shall have clear decision-making authority to act and to direct actions to be taken by Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, and Purchasing- Selling Entities within its Reliability Coordinator Area to preserve the integrity and reliability of the Bulk Electric System. These actions shall be taken without delay, but no longer than 30 minutes.</p>		<p> <input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted </p> <p>NERC requirement R3 applies to the WECC Reliability Coordinator. This requirement is not applicable in Alberta.</p>	<p>ENMAX Power Corporation</p> <p> <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose </p>	
<p>R4. Reliability Coordinators that delegate tasks to other entities shall have formal operating agreements with each entity to which tasks are delegated. The Reliability Coordinator shall verify that all delegated tasks are understood, communicated, and addressed within its Reliability Coordinator Area. All responsibilities for complying with NERC and regional</p>		<p> <input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted </p> <p>NERC requirement R4 applies to the WECC Reliability Coordinator. This requirement is not applicable in Alberta.</p>	<p>ENMAX Power Corporation</p> <p> <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose </p>	

standards applicable to Reliability Coordinators shall remain with the Reliability Coordinator.				
<p>R5. The Reliability Coordinator shall list within its reliability plan all entities to which the Reliability Coordinator has delegated required tasks</p>		<input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted NERC requirement R5 applies to the WECC Reliability Coordinator. This requirement is not applicable in Alberta.	<p>ENMAX Power Corporation</p> <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose	
<p>R6. The Reliability Coordinator shall verify that all delegated tasks are carried out by NERC-certified Reliability Coordinator operating personnel.</p>		<input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted NERC requirement R6 applies to the WECC Reliability Coordinator. This requirement is not applicable in Alberta.	<p>ENMAX Power Corporation</p> <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose	
<p>R7. The Reliability Coordinator shall have clear, comprehensive coordination agreements with adjacent Reliability Coordinators to ensure that System Operating Limit or Interconnection Reliability Operating Limit violation mitigation requiring actions in adjacent Reliability Coordinator Areas are coordinated.</p>		<input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted NERC requirement R7 applies to the WECC Reliability Coordinator. This requirement is not applicable in Alberta.	<p>ENMAX Power Corporation</p> <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose	
<p>R8. Transmission Operators, Balancing Authorities, Generator</p>	<p>R1. The ISO must comply with a Reliability Coordinator directive</p>	<input type="checkbox"/> New <input checked="" type="checkbox"/> Amended	<p>ENMAX Power Corporation</p> <input checked="" type="checkbox"/> Support	

<p>Operators, Transmission Service Providers, Load-Serving Entities, and Purchasing-Selling Entities shall comply with Reliability Coordinator directives unless such actions would violate safety, equipment, or regulatory or statutory requirements. Under these circumstances, the Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, or Purchasing-Selling Entity shall immediately inform the Reliability Coordinator of the inability to perform the directive so that the Reliability Coordinator may implement alternate remedial actions.</p>	<p>issued by the WECC Reliability Coordinator in accordance with the parties' contractual obligations unless:</p> <ul style="list-style-type: none"> a) complying is not within the physical capabilities of the interconnected electric system; b) complying would create serious or immediate risks to human health or safety; c) complying would create a real and substantial risk of undue injury to the environment; d) complying would create an immediate risk of damage to facilities or equipment within the interconnected electric system or cause the operation of any electrical facilities or equipment within the interconnected electric system in an unsafe manner; e) complying would cause the ISO to violate any applicable law, regulation, lawfully promulgated rule or order, or other legal obligation, or any provision of the reliability standards; f) complying would conflict with any other legal requirements whatsoever, including any court or administrative orders; 	<p><input type="checkbox"/> Deleted</p> <p>NERC requirement R8 contains two requirements that have been split into Alberta requirements R1 and R2 to separate the responsibilities of the AESO.</p> <p>With respect to NERC requirement R8, the AESO is the only Alberta entity that has a contractual relationship with the WECC Reliability Coordinator. The AESO operates in accordance with the WECC-AESO Membership and Operating Agreement and the Security Coordination Agreement.</p> <p>Alberta Variance¹: Added the wording, "in accordance with the parties' contractual obligations" in requirement R1 to recognize the contractual obligations between the ISO and the WECC Reliability Coordinator as it applies to the ISO complying with directives issued by the WECC Reliability Coordinator.</p>	<p><input type="checkbox"/> Support with language suggestions</p> <p><input type="checkbox"/> Oppose</p>	
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¹ An Alberta variance is a change from the US Reliability Standard that the AESO has determined is material.

	<p>g) complying would contravene constitutional or legislative limitations with respect to the ISO's ability to delegate authority or discretion over its operations to another party; or</p> <p>h) complying would contravene the ISO's statutory obligations.</p> <p>R2. The ISO must immediately notify the WECC Reliability Coordinator that the ISO has determined it cannot comply if the ISO refuses to comply with a <u>directive from the WECC Reliability Coordinator</u> directive in accordance with requirement R1 so that the WECC Reliability Coordinator may implement alternate remedial actions.</p>	<p>Amended the wording of requirement R2 from “the ISO has determined it cannot comply” to “if the ISO refuses to comply” to align with the typical wording used in the Electric Utilities Act.</p>		
<p>R9. The Reliability Coordinator shall act in the interests of reliability for the overall Reliability Coordinator Area and the Interconnection before the interests of any other entity.</p>		<p><input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted</p> <p>NERC R1 applies to the WECC Reliability Coordinator. This requirement is not applicable in Alberta.</p>	<p>ENMAX Power Corporation <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	
<p>M1. Each Regional Reliability Organization shall have, and provide upon request, evidence that could include, but is not limited to signed agreements or other</p>			<p>ENMAX Power Corporation <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	

<p>equivalent evidence that will be used to confirm that it established one or more Reliability Coordinators to continuously assess transmission reliability and coordinate emergency operations among the operating entities within the region and across the regional boundaries as described in Requirement 1.</p>				
<p>M2. Each Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, job descriptions, signed agreements, an authority letter signed by an officer of the company, or other equivalent evidence that will be used to confirm that the Reliability Coordinator has the authority to act as described in Requirement 3.</p>			<p>ENMAX Power Corporation <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	
<p>M3. The Reliability Coordinator shall have and provide upon request current formal operating agreements with entities that have been delegated any Reliability Coordinator tasks (Requirement 4 Part 1).</p>			<p>ENMAX Power Corporation <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	
<p>M4. The Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, job descriptions, signed agreements, records of training sessions, monitoring</p>			<p>ENMAX Power Corporation <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	

<p>procedures or other equivalent evidence that will be used to confirm that all delegated tasks are understood, communicated, and addressed within its Reliability Coordinator Area (Requirement 4 Part 2 and Requirement 5)</p>				
<p>M5. The Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, records that show each operating person assigned to perform a Reliability Coordinator delegated task has a NERC Reliability Coordinator certification credential, or equivalent evidence confirming that delegated tasks were carried out by NERC certified Reliability Coordinator operating personnel, as specified in Requirement 6.</p>			<p>ENMAX Power Corporation <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	
<p>M6. The Reliability Coordinator shall have and provide upon request as evidence, signed agreements with adjacent Reliability Coordinators that will be used to confirm that it will coordinate corrective actions in the event SOL and IROL mitigation actions within neighboring areas must be taken. (Requirement 7)</p>			<p>ENMAX Power Corporation <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	
<p>M7. Each Transmission Operator, Balancing Authority, Generator Operator, Transmission Service</p>			<p>ENMAX Power Corporation <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language</p>	

<p>Provider, Load-Serving Entity, or Purchasing-Selling Entity shall have and provide upon request evidence that could include, but is not limited to, operator logs, voice recordings or transcripts of voice recordings, or other equivalent evidence that will be used to confirm that it did comply with the Reliability Coordinator's directives, or if for safety, equipment, regulatory or statutory requirements it could not comply, it informed the Reliability Coordinator immediately. (Requirement 8)</p>			<p>suggestions <input type="checkbox"/> Oppose</p>	
	<p>MR1. Evidence, such as logs, voice recordings, electronic tags, electronic communications, metering or other data, exists and confirms the ISO complied with the WECC Reliability Coordinator directive as specified in requirement R1. Where the ISO did not follow a WECC Reliability Coordinator directive, evidence exists to demonstrate one, or more, of the exceptions noted in requirement R1.</p> <p><u>MR1. Evidence of complying with a directive from the WECC Reliability Coordinator as required in requirement R1 exists. Evidence may include operator logs, voice recordings, electronic e-tags, electronic communications, metering or other data. Evidence of confirming the rationale</u></p>	<p>Note: Measures were amended since the last draft to be consistent with the style used for drafting Alberta reliability standards.</p>	<p>ENMAX Power Corporation <input checked="" type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose</p>	

	<p><u>for not complying with a WECC Reliability Coordinator directive as required in requirement R1 exists. Evidence may include documentation confirming the rationale of not complying is due to one or more of the justifications as described in R1sub-requirements (a) through (h) of requirement R1 exist.</u></p> <p>MR2. Evidence, such as logs, voice recordings, electronic communications, disturbance reports, exists and confirms notification occurred as specified in requirement R2.</p> <p><u>MR2. Evidence of immediately notifying the person who issued the Reliability Coordinator directive as required in requirement R2 exists. Evidence may include operator logs, voice recordings, or electronic communications.</u></p>			
<p>Compliance To view the compliance section D of the NERC reliability standard follow this link: http://www.nerc.com/files/IRO-001-1_1.pdf</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 Monitoring Program, available on the AESO website at: http://www.aeso.ca/loadsettlement/17189.html</p>		

Regional Differences None identified.	Regional Differences None identified.			
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