

Stakeholder Comparison Comment Rationale Matrix

2011-03-18

AESO AUTHORITATIVE DOCUMENT PROCESS

Alberta Reliability Standard – FAC-014-AB-2 Establish and Communicate System Operating Limits

<p>Date of Request for Comment [yyyy/mm/dd]: <u>2011-03-18</u></p> <p>Period of Consultation [yyyy/mm/dd]: <u>2011-03-18</u> through <u>2011-04-15</u></p> <p>Comments From: <u>ENMAX Power Corporation</u></p> <p>Date [yyyy/mm/dd]: <u>03-18-11</u></p>	<p>Contact: <u>Kevin Neithercut</u></p> <p>Phone: <u>403-514-1544</u></p> <p>E-mail: <u>kneithercut@enmax.com</u></p>
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**COMPARISON BETWEEN NERC FAC-014-2 AND ALBERTA FAC-014-AB-2
ESTABLISH AND COMMUNICATE SYSTEM OPERATING LIMITS**

NERC FAC-014-2	Alberta FAC-014-AB-2	Reason for Differences	Stakeholder Comments (Insert comments here)	AESO Replies
<p>Purpose To ensure that System Operating Limits (SOLs) used in the reliable planning and operation of the Bulk Electric System (BES) are determined based on an established methodology or methodologies.</p>	<p>Purpose The purpose of this reliability standard is to establish and communicate system operating limits to be used in the reliable planning and operation of the bulk electric system.</p>		Support	
<p>Applicability 4.1. Reliability Coordinator 4.2. Planning Authority 4.3. Transmission Planner 4.4. Transmission Operator</p>	<p>Applicability This reliability standard applies to:</p> <ul style="list-style-type: none"> the ISO 	<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>	Support	
<p>Effective Date January 1, 2009</p>	<p>Effective Date July 1, 2012</p>	<p>This allows 90 days after the system operating limits methodology, as required in FAC-010-AB-2.1, comes into effect, in order to allow time for the AESO to establish and communicate the system operating limits.</p>	Support	
<p>R1. The Reliability Coordinator shall ensure that SOLs, including Interconnection Reliability Operating</p>		<p><input type="checkbox"/> New <input type="checkbox"/> Amended</p>	Support	

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Limits (IROLs), for its Reliability Coordinator Area are established and that the SOLs (including Interconnection Reliability Operating Limits) are consistent with its SOL Methodology.		<input checked="" type="checkbox"/> Deleted NERC requirement R1 applies to Reliability Coordinators and therefore is not applicable to any entities in Alberta.		
R2. The Transmission Operator shall establish SOLs (as directed by its Reliability Coordinator) for its portion of the Reliability Coordinator Area that are consistent with its Reliability Coordinator’s SOL Methodology.	R1. The ISO must establish system operating limits in its operations horizon that are consistent with the WECC Reliability Coordinator’s system operating limits methodology.	<input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted Alberta Variance¹: Did not include the wording from NERC FAC-014-2 requirement R2 that states, “establish system operating limits as directed by its Reliability Coordinator”, but rather, Alberta requirement R1 requires the AESO to develop system operating limits consistent with the WECC Reliability Coordinator’s system operating limits methodology. Added clarity in requirement R1 that the establishment of system operating limits applies in the operations time horizon.	Support	

¹ An Alberta variance is a change from the US Reliability Standard that the AESO has determined is material.

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<p>R3. The Planning Authority shall establish SOLs, including IROLs, for its Planning Authority Area that are consistent with its SOL Methodology.</p>	<p>R2. The ISO must establish system operating limits in its planning horizon, including interconnection reliability operating limits that are consistent with the ISO's system operating limits methodology.</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended to improve clarity and consistency.</p> <p>FAC-010-AB establishes the AESO's system operating limits methodology. The Alberta Reliability Standards section of the AESO website, in particular the section that contains this reliability standard, will contain reference to FAC-010-AB as a related authoritative document.</p>	<p>Support</p>	
<p>R4. The Transmission Planner shall establish SOLs, including IROLs, for its Transmission Planning Area that are consistent with its Planning Authority's SOL Methodology.</p>		<p><input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted</p> <p>The AESO is the transmission planner and the planning authority in Alberta. NERC requirement R4 is therefore redundant with Alberta requirement R2.</p>	<p>Support</p>	
<p>R5. The Reliability Coordinator, Planning Authority and Transmission Planner shall each</p>	<p>R3. The ISO must provide its system operating limits and interconnection reliability</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended</p>	<p>Support</p>	

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<p>provide its SOLs and IROLs to those entities that have a reliability-related need for those limits and provide a written request that includes a schedule for delivery of those limits as follows:</p>	<p>operating limits to all of the following prior to the implementation of the system operating limits:</p> <ul style="list-style-type: none"> • each adjacent planning authority and each planning authority that indicated it has a reliability-related need for the system operating limits; • the WECC Reliability Coordinator; and • each adjacent transmission operator and each transmission operator that indicated it has a reliability-related need for the system operating limits. 	<p><input type="checkbox"/> Deleted</p> <p>Amended to improve clarity and consistency.</p>		
<p>R5.1. The Reliability Coordinator shall provide its SOLs (including the subset of SOLs that are IROLs) to adjacent Reliability Coordinators and Reliability Coordinators who indicate a reliability-related need for those limits, and to the Transmission Operators, Transmission Planners, Transmission Service Providers and Planning Authorities within its Reliability Coordinator Area. For each IROL, the Reliability Coordinator shall provide the</p>		<p><input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted</p> <p>NERC requirement R5.1 and its sub-requirements apply to Reliability Coordinators and therefore are not applicable to any entities in Alberta.</p>	<p>Support</p>	

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<p>following supporting information:</p> <p>R5.1.1. Identification and status of the associated Facility (or group of Facilities) that is (are) critical to the derivation of the IROL.</p> <p>R5.1.2. The value of the IROL and its associated Tv.</p> <p>R5.1.3. The associated Contingency(ies).</p> <p>R5.1.4. The type of limitation represented by the IROL (e.g., voltage collapse, angular stability).</p>				
<p>R5.2. The Transmission Operator shall provide any SOLs it developed to its Reliability Coordinator and to the Transmission Service Providers that share its portion of the Reliability Coordinator Area</p>		<p><input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted</p> <p>NERC requirement R5.2 is included in Alberta requirement R3 as the AESO is the applicable entity for this requirement in Alberta.</p>	Support	
<p>R5.3. The Planning Authority shall provide its SOLs (including the subset of SOLs that are IROLs) to adjacent Planning Authorities, and to Transmission Planners,</p>		<p><input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted</p> <p>NERC requirement R5.3 is included</p>	Support	

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Transmission Service Providers, Transmission Operators and Reliability Coordinators that work within its Planning Authority Area.		in Alberta requirement R3 as the AESO is the applicable entity for this requirement in Alberta.		
<p>R5.4. The Transmission Planner shall provide its SOLs (including the subset of SOLs that are IROLs) to its Planning Authority, Reliability Coordinators, Transmission Operators, and Transmission Service Providers that work within its Transmission Planning Area and to adjacent Transmission Planners.</p>		<input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted NERC requirement R5.4 is included in Alberta requirement R3 as the AESO is the applicable entity for this requirement in Alberta.	Support	
<p>R6. The Planning Authority shall identify the subset of multiple contingencies (if any), from Reliability Standard TPL-003 which result in stability limits.</p> <p>R6.1. The Planning Authority shall provide this list of multiple contingencies and the associated stability limits to the Reliability Coordinators that monitor the facilities associated with these contingencies and limits.</p> <p>R6.2. If the Planning Authority does</p>	<p>R4. The ISO must identify and develop a list of the subset of multiple contingencies from reliability standard TPL-003-AB, which result in stability limits as determined if any that exist in its planning horizon.</p> <p>R4.1 The ISO must provide this list, as developed in requirement R4, and the associated stability limits to the WECC Reliability Coordinator.</p> <p>R4.2 The ISO must notify the</p>	<input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted Amended to improve clarity and consistency.	Support	

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not identify any stability-related multiple contingencies, the Planning Authority shall so notify the Reliability Coordinator.	WECC Reliability Coordinator where the ISO has not identified any stability-related multiple contingencies .			
	MR1. Evidence that the ISO's system operating limits are established as required in requirement R1 exist. Evidence may include dated reports or other documentation that confirm the limits are consistent with the WECC's methodology.		Support	
M1. The Reliability Coordinator, Planning Authority, Transmission Operator, and Transmission Planner shall each be able to demonstrate that it developed its SOLs (including the subset of SOLs that are IROLs) consistent with the applicable SOL Methodology in accordance with Requirements 1 through 4.	MR2. Evidence that the ISO established its system operating limits as required in requirement R2 exists. Evidence may include dated reports or other documentation that confirm the limits are consistent with the ISO's methodology.		Support	
M2. The Reliability Coordinator, Planning Authority, Transmission Operator, and Transmission Planner shall each have evidence that its SOLs (including the subset of SOLs	MR3. Evidence to confirm the ISO provided its system operating limits and interconnection reliability operating limits as required in requirement R3 exists.		Support	

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that are IROLs) were supplied in accordance with schedules supplied by the requestors of such SOLs as specified in Requirement 5.	Evidence may include record of email notice or courier/mail notice to appropriate recipient that identifies contents submitted.			
M3. The Planning Authority shall have evidence it identified a list of multiple contingencies (if any) and their associated stability limits and provided the list and the limits to its Reliability Coordinators in accordance with Requirement 6.	MR4. Evidence that the ISO identified and listed the subset of multiple contingencies as required in requirement R4 exists. Evidence may include dated reports, letters, or other documentation containing the list of multiple contingencies .		Support	
	MR4.1 Evidence that the ISO provided the list and associated stability limits as required in requirement R4.1 exists. Evidence may include record of email notice or courier/mail notice to appropriate recipient that identifies contents submitted.		Support	
	MR4. 2 Evidence that the ISO made the notification as required in requirement R4.2 exists. Evidence may include record of email notice or courier/mail notice to appropriate recipient that identifies contents submitted.		Support	

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<p>Compliance To view the compliance section D of the NERC reliability standard follow this link: http://www.nerc.com/files/BAL-002-0.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>		
<p>Regional Differences None identified.</p>	<p>Regional Differences None identified.</p>			

New Definitions	Stakeholder Comments (Insert comments here)	AESO Replies
None		