



Stakeholder Comparison Comment Rationale Matrix

2010-09-30

AESO AUTHORITATIVE DOCUMENT PROCESS

Alberta Reliability Standard – COM-001-AB-1.1 Telecommunications

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>2010/09/30</u> Period of Consultation [yyyy/mm/dd]: <u>2010/09/30</u> through <u>2010/10/29</u> Comments From: <u>EPCOR Distribution & Transmission Inc. (EDTI)</u> Date [yyyy/mm/dd]: <u>2010/10/29</u>	Contact: <u>Travis Robinson</u> Phone: <u>780-412-3079</u> E-mail: <u>trobinson@epcor.ca</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 COM-001-1.1 AND ALBERTA COM-001-AB-1.1

Telecommunications

NERC COM-001-1.1	Alberta COM-001-AB-1.1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p>Purpose Each Reliability Coordinator, Transmission Operator and Balancing Authority needs adequate and reliable telecommunications facilities internally and with others for the exchange of Interconnection and operating information necessary to maintain reliability.</p>	<p>Purpose The purpose of this reliability standard is to ensure the ISO and each legal owner of a transmission facility have adequate and reliable telecommunication devices internally and with others for the exchange of interconnection and operating information necessary to maintain reliability.</p>	<p>Clarified the purpose to align with the content of the reliability standard.</p>	<p>EDTI requests clarification of the phrase 'interconnection and operating information', and whether it includes Teleprotection data?</p>	
<p>Applicability 4.1. Transmission Operators. 4.2. Balancing Authorities. 4.3. Reliability Coordinators. 4.4. NERCNet User Organizations.</p>	<p>Applicability This reliability standard applies to the following:</p> <ul style="list-style-type: none"> • the legal owner of a transmission facility; and • the operator of a transmission facility; and • the ISO. 	<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 terms 'legal owner of a transmission facility' and 'operator of a transmission facility' are not defined functional entities in the AESO's Alberta Reliability Standards Functional Model and Criteria for Registration. As such, there are currently no entities registered in these categories, and it is unclear to EDTI on how the AESO will identify, monitor and enforce compliance. EDTI believes that before standards are approved with new categories of applicability, the new categories should go through stakeholder consultation and be approved as required.</p>	
<p>Effective Date May 13, 2009</p>	<p>Effective Date One hundred and eighty (180) days</p>	<p>To allow a reasonable amount of</p>	<p>EDTI requests more than 180</p>	

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	after the date the Commission approves it.	time for Alberta entities to implement this Alberta Reliability Standard.	<p>days for COM-001-AB-1.1 to become effective after the Commission approves it. Budget Cycle, vendor delivery times and work crew availability may all cause delays that would prevent the implementation of the corrective action necessary to maintain compliance with the standard within the 180 day time period.</p> <p>EDTI notes that there are a large number of standards scheduled to be submitted to the AUC for approval in the next couple of months, with the majority having their effective dates 180 days after approval. While an effective date of 180 days may be appropriate for one standard, it may not be appropriate for numerous standards that all become effective at the same time.</p>	
<p>R1. Each Reliability Coordinator, Transmission Operator and Balancing Authority shall provide adequate and reliable telecommunications facilities for the exchange of Interconnection and operating information:</p>	<p>R1 The ISO must provide adequate, reliable, and, where applicable, diverse and redundant telecommunication devices for the exchange of interconnection and operating information internally and with the following:</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>NERC requirement R1 was split into two Alberta requirements, R1 for the</p>	<p>EDTI notes that the use of the phrase 'where applicable' is vague and unclear. EDTI requests clearly defined situations where diverse and redundant telecommunication devices are required for requirements R1 and</p>	

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<p>R1.1. Internally.</p> <p>R1.2. Between the Reliability Coordinator and its Transmission Operators and Balancing Authorities.</p> <p>R1.3. With other Reliability Coordinators, Transmission Operators, and Balancing Authorities as necessary to maintain reliability.</p> <p>R1.4. Where applicable, these facilities shall be redundant and diversely routed.</p>	<ul style="list-style-type: none"> • each legal owner of a transmission facility; • a transmission operator that is interconnected; • each adjacent balancing authority; and • the WECC Reliability Coordinator. <p>R2 Each legal owner of a transmission facility must provide adequate, reliable, and, where applicable, diverse and redundant telecommunication devices, for the exchange of interconnection and operating information internally and with the following:</p> <ul style="list-style-type: none"> • other legal owners of a transmission facility; • other transmission operators that are interconnected; and • the ISO. 	<p>ISO and R2 for the legal owner of a transmission facility.</p> <p>Moved the NERC sub-requirements for R1 into the main Alberta requirements R1 and R2.</p> <p>NERC sub-requirements R1.1, R1.2, R1.3, and R1.4 included as part of requirement R1 and R2.</p>	<p>R2.</p> <p>Also, EDTI notes that the specially defined term ‘interconnection’ is not used in accordance with its definition in the <i>ISO Authoritative Document Glossary</i>. In the Glossary, ‘interconnection’ is defined to mean the electrical connection of the AIES with any electric system in a jurisdiction bordering Alberta. It is EDTI’s understanding that the use of the word ‘interconnection’ within standard COM-001-AB-1.1 also refers to interconnections between transmission facilities within Alberta. EDTI recommends not using the specially defined term ‘interconnection’ or to amend the definition of the word in the <i>ISO Authoritative Document Consolidated Glossary</i>.</p>	
<p>R2. Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall manage, alarm, test and/or actively monitor vital telecommunications facilities. Special attention shall be given to emergency telecommunications</p>	<p>R3 The ISO and each operator of a transmission facility must, as of the effective date of this reliability standard, manage, alarm, test, and actively monitor its telecommunication devices that it has determined to be vital, including</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Removed the reference to ‘special attention’ as it is not measurable.</p>	<p>EDTI requests clarification of the term ‘actively monitor’, specifically in reference to actively monitoring non-routine emergency communication equipment. For this equipment is once-a-day or once-a-month adequate, or is</p>	

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<p>facilities and equipment not used for routine communications.</p>	<p>emergency telecommunication devices and equipment not used for routine communications.</p>	<p>Provided clarification that requirement R3 applies on a go forward basis from the effective date of this reliability standard. Added “as appropriate” to allow for making a determination of what are “vital” and “emergency” telecommunication devices.</p> <p>Combined the two sentences in the NERC requirement into a single sentence.</p>	<p>constant monitoring required?</p> <p>Also, it is unclear how often telecommunication devices are required to be tested based on this requirement. EDTI requests clarification on the testing requirement timeframe.</p>	
<p>R3. Each Reliability Coordinator, Transmission Operator and Balancing Authority shall provide a means to coordinate telecommunications among their respective areas. This coordination shall include the ability to investigate and recommend solutions to telecommunications problems within the area and with other areas.</p>	<p>R4 The ISO must coordinate telecommunications with each legal owner of a transmission facility, the WECC Reliability Coordinator, adjacent interconnected transmission operators and adjacent balancing authorities, including the ability to investigate and recommend solutions to telecommunications problems within Alberta.</p> <p>R5 Each operator of a transmission facility must coordinate telecommunications with the ISO and adjacent interconnected transmission operators, including the ability to</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Split into two requirements to delineate requirements between AESO and a legal owner of a transmission facility.</p>	<p>EDTI requests clarification on whether Teleprotection data is included in the telecommunication exchange between entities described in requirements R4 and R5.</p>	

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Telecommunications

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	investigate and recommend solutions to telecommunications problems within Alberta.			
<p>R4. Unless agreed to otherwise, each Reliability Coordinator, Transmission Operator, and Balancing Authority shall use English as the language for all communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected Bulk Electric System. Transmission Operators and Balancing Authorities may use an alternate language for internal operations.</p>	<p>R6 The ISO and each operator of a transmission facility must use the English language for all communications between their respective operating personnel responsible for the real-time generation control and operation of the bulk electric system.</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended for clarity and consistency.</p> <p>The AESO is aware that this requirement appears to apply better in COM-002 Communications and Coordination; however the AESO has chosen to leave this requirement in COM-001 at this time.</p>	<p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p>R5. Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall have written operating instructions and procedures to enable continued operation of the system during the loss of telecommunications facilities.</p>	<p>R7 The ISO and each operator of a transmission facility must have written operating instructions and procedures to enable continued operation of the system during the loss of telecommunications devices.</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended for clarity and consistency.</p>	<p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p>R6. Each NERCNet User Organization shall adhere to the requirements in Attachment 1- COM-001, "NERCNet Security Policy."</p>		<p><input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted</p> <p>Alberta Variance: The NERC requirement for NERCNet</p>	<p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	

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Telecommunications

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		User organizations to adhere to Attachment 1- COM-001, "NERCNet Security Policy" was deleted as no Alberta entity is a NERCNet User Organization.		
	<p>MR1 Evidence of adequate and reliable telecommunications exists, as specified in requirement R1, such as a description of devices or a diagram identifying the communications.</p> <p>MR2 Evidence of adequate and reliable telecommunications exists, as specified in requirement R2, such as a description of devices or a diagram identifying the communications.</p>	<p><input checked="" type="checkbox"/> New <input type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Added to align with requirements R1 and R2.</p>	<p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p>M1. Each Reliability Coordinator, Transmission Operator and Balancing Authority shall have and provide upon request evidence that could include, but is not limited to communication facility test-procedure documents, records of testing, and maintenance records for communication facilities or equivalent that will be used to confirm that it manages, alarms, tests and/or actively monitors vital telecommunications facilities. (Requirement 2 part 1)</p>	<p>MR3 Evidence exists to confirm the ISO and each legal owner of a transmission facility manages, alarms, tests and actively monitors vital telecommunications devices as specified in requirement R3.</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><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	

COMPARISON BETWEEN NERC COM-001-1.1 AND ALBERTA COM-001-AB-1.1

Telecommunications

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	<p>MR4 Evidence exists to confirm coordinated telecommunications as specified in requirement R4, such as email, log files, voice recordings or other equivalent evidence.</p> <p>MR5 Evidence exists to confirm coordinated telecommunications as specified in requirement R5, such as email, log files, voice recordings or other equivalent evidence.</p>	<p><input checked="" type="checkbox"/> New <input type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Added to align with requirements R4 and R5.</p>	<p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p>M2. The Reliability Coordinator, Transmission Operator or Balancing Authority 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, that will be used to determine compliance to Requirement 4.</p>	<p>MR6 Evidence exists to confirm that the English language is used for all communications as specified in requirement R6, such as operator logs, email, voice recordings or electronic tag records.</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended to align with requirement R6.</p>	<p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	
<p>M3. Each Reliability Coordinator, Transmission Operator and Balancing Authority shall have and provide upon request its current operating instructions and procedures, either electronic or hard copy that will be used to confirm that it meets Requirement 5.</p>	<p>MR7 Written operating instructions and procedures exist as specified in requirement R7.</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended to align with requirement R7.</p>	<p>EDTI recommends that 'electronic copies' of the operating instructions are also included as an alternative to the written instructions as a measure to this requirement.</p>	
<p>M4. The NERCnet User Organization shall have and provide upon request</p>		<p><input type="checkbox"/> New <input type="checkbox"/> Amended</p>	<p><i>Insert comments, reason for</i></p>	

COMPARISON BETWEEN NERC COM-001-1.1 AND ALBERTA COM-001-AB-1.1

Telecommunications

NERC COM-001-1.1	Alberta COM-001-AB-1.1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
evidence that could include, but is not limited to documented procedures, operator logs, voice recordings or transcripts of voice recordings, electronic communications, etc that will be used to determine if it adhered to the (User Accountability and Compliance) requirements in Attachment 1-COM-001. (Requirement 6)		<input checked="" type="checkbox"/> Deleted	<i>position, and alternate proposal (if any).</i>	
Compliance To view the compliance section D of the NERC reliability standard follow this link: http://www.nerc.com/files/COM-001-1_1.pdf		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 .		
Regional Differences None identified.	None identified.	Not applicable in Alberta		

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

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