



Date of Request for Comment [yyyy/mm/dd]: 2011-09-13

Period of Consultation [yyyy/mm/dd]: 2011-09-13 through 2011-10-07

COMPARISON BETWEEN NERC EOP-001-2B AND ALBERTA EOP-001-AB-2B

Emergency Operations Planning

NERC EOP-001-2 <b>b</b>	Final proposed EOP-001-AB-2 <b>b</b>	Reason for difference between EOP-001-AB-2b and NERC EOP-001-2b	Stakeholder Comments (Insert comments here)	AESO Replies
<p><b>Purpose</b> Each Transmission Operator and Balancing Authority needs to develop, maintain, and implement a set of plans to mitigate operating emergencies. These plans need to be coordinated with other Transmission Operators and Balancing Authorities, and the Reliability Coordinator.</p>	<p><b>Purpose</b> The purpose of this <b>reliability standard</b> is to define requirements for the development, maintenance, implementation and coordination of plans to mitigate operating emergencies.</p>		<p><b>EPCOR:</b></p> <ol style="list-style-type: none"> <li>1. It is unclear as to what constitutes an operating emergency. EDTI recommends an adoption of a formal definition of “operating emergencies</li> </ol>	<ol style="list-style-type: none"> <li>1. NERC has not provided a definition or an interpretation for “operating emergency” and in order to stay aligned with NERC, the AESO prefers not to define this term at this time. However, it is the AESO’s opinion that the plain meaning of the term “operating emergencies” in conjunction with the application of Good Electric Industry Practice is sufficient for the adoption of proposed EOP-001-AB-2b in Alberta.</li> </ol>
<p><b>Applicability</b> 4.1. Balancing Authorities. 4.2. Transmission Operators.</p>	<p><b>Applicability</b> This <b>reliability standard</b> applies to: (a) the <b>operator</b> of a <b>transmission</b></p>	<p>The terms used to describe applicable entities in this reliability standard have been amended from</p>	<p><b>Capital Power:</b></p> <ol style="list-style-type: none"> <li>2. CPC appreciates the</li> </ol>	<ol style="list-style-type: none"> <li>2. The AESO disagrees with</li> </ol>

	<p><b>facility</b> that is part of the <b>bulk electric system</b>; and (b) the <b>ISO</b>.</p> <p>This <b>reliability standard</b> does not apply to the <b>operator</b> of a <b>transmission facility</b> whose <b>transmission facility</b> is a radial connection from a <b>generating unit</b> or an <b>aggregated generating facility</b> to either the <b>transmission system</b> or to <b>transmission facilities</b> within the city of Medicine Hat.</p>	<p>the NERC version in order to correctly identify the applicable entities in Alberta and to align with terms included in the AESO Consolidated Authoritative Documents Glossary.</p>	<p>opportunity to provide comments for the AESO’s development of EOP-001-AB-2, as well as the AESO’s efforts to clarify the applicability of the standard to generator interconnection facilities.</p> <p>CPC supports the recognition of the primary purpose of a facility to more clearly define a generator interconnection facility, and proposes the following exclusion to the proposed standard:</p> <p>“This reliability standard does not apply to the operator of a generator interconnection facility whose generator interconnection facility is a sole use facility for the purpose of connecting a generating unit or an aggregated generating facility to either the transmission system or to transmission facilities within the city of Medicine Hat.”</p> <p><b>ENMAX:</b></p> <p>3. ENMAX supports the intent of the exclusion language</p>	<p>Capital Power that the term “generator interconnection facility” is required for proposed EOP-001-AB-2b. The definitions of “transmission facility” and “generating unit” and the current wording of the applicability section of this reliability standard provides sufficient clarity of the applicable facilities under this reliability standard.</p> <p>For example, if “switch yards” associated with generating units were to be included in this reliability standard, then the following wording would appear in the applicability section of this reliability standard: ” The operator of a generating unit, that portion of which, but for the exclusion of generating unit in the definition of transmission facility, would otherwise meet the criteria for being a transmission facility that is part of the bulk electric system.”</p> <p>3. Please see AESO Reply 2 above.</p>
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			<p>suggested by ATCO and TransAlta, which is to exclude from applicability those transmission facilities whose purpose is the connection of generators to the bulk transmission system. ENMAX notes that other language having the same intent, and building on that used in Section 8(3)(3)(a) of the AESO's tariff to distinguish between participant-related and system-related facilities, may be both broadly applicable and concise.</p> <p><b>TransAlta</b></p> <p>4. TransAlta understands the AESO is working to clarify the applicability of generator interconnection facility by using the exemption wording in this applicability section. Our understanding is this wording would be intended to exclude generation facilities and their Associated interconnections from the applicability in this standard. While this is a very good improvement TransAlta offers the following suggestions to help better define:</p>	<p>4. Please see AESO Reply 2 above. It is the AESO's opinion that the clarification provided in AESO Reply 2 combined with the exclusion of transmission facilities that provide a radial connection as described is sufficient to address which operators of a transmission facility for which proposed EOP-001-AB-2b applies.</p>
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			<p>1. While this wording will handle simple configurations it is still not clear whether what part of the generation interconnection facility is a part of transmission facility or generation facility. This issue remains unresolved.</p> <p>2. The second is the interpretation of “radial connection”. Instead of using the facility configuration, TransAlta recommends AESO address the generation interconnection facility applicability from the function of facility, i.e. what purpose the facility is when the generator uses the facility. For example, the wordings can be revised as “This reliability standard does not apply to the operator of a facility when the operator uses the facility to produce the real power to the AIES only”, or we can try the NERC wording of sole use facility.</p> <p>3. For the AESO’s information the wording as provided will not automatically exclude all generators. Radial use connections, while common, do not apply to all</p>	
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			<p>configurations.</p> <p><b>Nexen:</b></p> <p><b>5.</b> Nexen is seeking additional clarity and or confirmation from the AESO on:</p> <p>a) how the proposed wording for generators who may own transmission facilities (due to the definition provided in the AESO’s glossary and as per the EUA) clearly demonstrates this standards does not apply to them; and</p> <p>b) how the proposed wording would be applied to Industrial System Designation (ISD) facilities.</p> <p><b>6.</b> a) As the AESO can appreciate, generator interconnections can vary significantly between different facilities. Are there any circumstances or interconnection configurations in which the AESO can envision a generator connected via a radial line could still be considered a transmission facility operator and must comply with this reliability standard? If so</p>	<p><b>5.</b> Please see AESO Reply 4 above.</p> <p>Applicability to industrial systems would be determined by assessing the bulk electric system transmission facilities operated by the industrial system against the applicability section of proposed EOP-001-AB-2b.</p> <p><b>6.</b> The AESO does not anticipate that there are any circumstances or interconnection configurations in which a transmission facility that provides a radial connection between a generating unit(s) and the transmission system would be applicable to proposed EOP-001-AB-2b. If there was such a situation, the applicability section of this reliability standard would</p>
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			<p>please explain. Is there an opportunity to modify this section to capture only those entities in which the AESO feels were intended to be compliant with this standard?</p> <p>7. b) ISD facilities are or can be load and generator facilities. Nexen submits the definition of “<b>bulk electric system</b>” along with the generator disclaimer “does not apply to the <b>operator</b> of a <b>transmission facility</b> whose <b>transmission facility</b> is a radial connection from a <b>generating unit</b>” could create a conflict and confusion when determining applicability for ISD facility. ISD’s may own and or operate facilities &gt;100kV (much like generators) but as they could be a load this standard may apply to them. That being said, as ISD’s are also a generator, this standard may not apply to them. Much like the question posed above, does the AESO envision any circumstances and interconnection configurations in which and ISD would have to comply with this standard? If so is there an opportunity to</p>	<p>need to be revised to identify this exception.</p> <p>7. The AESO disagrees with Nexen’s assertion. In the AESO’s opinion, there is sufficient information in the applicability section for the participant to determine whether or proposed EOP-001-AB-2b applies to their facility. Please note that the definition of “bulk electric system” states that radial transmission facilities serving only load with one transmission source are generally not included.</p>
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			<p>provide further clarity to this section to simplify an applicability assessment? Is there an opportunity to include some wording that would take into account dual-use / industrial facilities?</p> <p><b>Suncor:</b></p> <p>8. Suncor requests AESO to provide examples of “<b>transmission facility</b> [that] is a radial connection from a <b>generating unit</b> or an <b>aggregated generating facility</b> to either the <b>transmission system...?”</b></p>	<p>8. Please refer to AESO Reply 4 above.</p>
<p><b>Effective Date</b> Twenty-four months after the first day of the first calendar quarter following applicable regulatory approval. In those jurisdictions where no regulatory approval is required, all requirements go into effect twenty-four months after Board of Trustees adoption.</p>	<p><b>Effective Date</b> <del>October 1, 2011-</del> <u>January 1, 2014</u></p>		<p><b>EPCOR</b></p> <p>9. EDTI requests a later effective date than October 1, 2012. EDTI notes that the NERC standard became effective 24 months after it was approved. EDTI suggests for the Alberta standard have a similar effective date.</p>	<p>9. The AESO agrees with EPCOR and has revised the effective date in final proposed EOP-001-AB-2b.</p>
<p><b>R1.</b> Balancing Authorities shall have operating agreements with adjacent</p>	<p><b>R1</b> The <b>ISO</b> must, as appropriate, have operating agreements with <b>adjacent balancing authorities</b> that contain</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended</p>		

<p>Balancing Authorities that shall, at a minimum, contain provisions for emergency assistance, including provisions to obtain emergency assistance from remote Balancing Authorities.</p>	<p>provisions for <b>emergency assistance</b>.</p>	<p><input type="checkbox"/> Deleted</p> <p><b>Alberta Variance<sup>1</sup>:</b></p> <p>Removed “including provisions to obtain emergency assistance from remote Balancing Authorities” as stated in NERC EOP-001-2 requirement R1. The AESO does not have the ability to obtain transmission rights from other transmission providers in order to obtain emergency assistance from remote balancing authorities.</p>		
<p><b>R2.</b> Each Transmission Operator and Balancing Authority shall:</p> <p><b>R2.1.</b> Develop, maintain, and implement a set of plans to mitigate operating emergencies for insufficient generating capacity.</p>	<p><b>R2</b> The <b>ISO</b> must develop, maintain and implement a capacity and energy emergency plan to mitigate insufficient generating capacity.</p>	<p><input type="checkbox"/> New</p> <p><input checked="" type="checkbox"/> Amended</p> <p><input type="checkbox"/> Deleted</p> <p>Identified the Alberta reliability entity applicable to this requirement. Specified the type of plan as a “capacity and energy emergency plan” to align with the reference to this type of plan in EOP-002-AB-2.</p>		
<p><b>R2.2.</b> Develop, maintain, and implement a set of plans to mitigate operating emergencies on the transmission system.</p>	<p><b>R3</b> Each of the <b>ISO</b> and the <b>operator</b> of a <b>transmission facility</b> must develop, maintain and implement plans to mitigate operating emergencies on the <b>transmission system</b>.</p>	<p><input type="checkbox"/> New</p> <p><input checked="" type="checkbox"/> Amended</p> <p><input type="checkbox"/> Deleted</p> <p>Identified Alberta reliability entities</p>	<p><b>EPCOR</b></p> <p><b>10.</b> It is unclear as to what constitutes an operating emergency. EDTI recommends an adoption of a</p>	<p><b>10.</b> Please see AESO Reply 1 above.</p>

<sup>1</sup> An Alberta variance is a change from the US Reliability Standard that the AESO has determined is material.  
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		applicable to this requirement.	formal definition of “operating emergencies”.	
<b>R2.3.</b> Develop, maintain, and implement a set of plans for load shedding.	<b>R4</b> Each of the <b>ISO</b> and the <b>operator</b> of a <b>transmission facility</b> must develop, maintain and implement plans for load shedding.	<input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted Identified Alberta reliability entities applicable to this requirement.		
<del><b>R2.4.</b> Develop, maintain, and implement a set of plans for system restoration.</del>		<input type="checkbox"/> New <input type="checkbox"/> Amended <input checked="" type="checkbox"/> Deleted This requirement was in the previous NERC version of this reliability standard, however, NERC has deleted it from NERC EOP-001-2.		
<b>R3.</b> Each Transmission Operator and Balancing Authority shall have emergency plans that will enable it to mitigate operating emergencies. At a minimum, Transmission Operator and Balancing Authority emergency plans shall include:	<b>R5</b> Each of the <b>ISO</b> and the <b>operator</b> of a <b>transmission facility</b> must include, at a minimum, when developing emergency plans as identified in requirements R2, R3 and R4, the following:	<input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted Amended for clarity and consistency.		
<b>R3.1.</b> Communications protocols to be used during emergencies	(a) communication protocols to be used during operating emergencies;			

<p><b>R3.2.</b> A list of controlling actions to resolve the emergency. Load reduction, in sufficient quantity to resolve the emergency within NERC-established timelines, shall be one of the controlling actions.</p> <p><b>R3.3.</b> The tasks to be coordinated with and among adjacent Transmission Operators and Balancing Authorities.</p> <p><b>R3.4.</b> Staffing levels for the emergency.</p>	<p>(b) a list of controlling actions to resolve the operating emergency within <b>NERC</b> established timelines, including, where appropriate, a controlling action to reduce load;</p> <p>(c) the tasks to be coordinated with and among any affected <b>operator</b> of a <b>transmission facility</b>, adjacent <b>interconnected transmission operator</b> and <b>adjacent balancing authority</b>, as appropriate; and</p> <p>(d) a procedure for adjusting staffing levels for the emergency, where appropriate.</p>	<p>Amended to include that shedding of load is not an appropriate action for all emergencies.</p> <p>NERC EOP-001-2 requirement R3.4 states emergency plans shall include “staffing levels for the emergency”, however specific staffing levels are difficult to specify since they may vary depending on the operating emergency. Clarified that a procedure for adjusting staffing levels is required.</p>	<p><b>Suncor:</b></p> <p><b>11.</b> R3.2: Transmission do not normally direct load shedding, this is a generation/operation function unless the reference is made to circuit breaker settings.</p> <p><b>12.</b> R3.4: Who have the jurisdiction to determine the appropriate staffing level during emergency (Operator or AESO)? In addition, who have the authority to determine the timeframe for additional resources / personnel allocation during emergency? To reflect the operating reality of very remote areas, will concession or exception be granted?</p>	<p><b>11.</b> Given the assumption that Suncor is referring to the Suncor division of responsibilities, the emergency plan should be written to describe how Suncor would accomplish load shedding if needed to relieve the emergency.</p> <p><b>12.</b> It is the responsibility of the market participant who develops the emergency plan to determine the appropriate staffing level during an emergency to comply with this requirement. Similarly this would also apply to establishing timeframes, additional resources and personnel allocation.</p>
<p><b>R4.</b> Each Transmission Operator and Balancing Authority shall include the applicable elements in Attachment 1-EOP-001-0 when developing an emergency plan.</p>	<p><b>R6</b> The <b>ISO</b> must consider the elements in Appendix 1 when developing a capacity and energy emergency plan in accordance with requirement R2.</p>	<p><input type="checkbox"/> New</p> <p><input checked="" type="checkbox"/> Amended</p> <p><input type="checkbox"/> Deleted</p> <p><b>Alberta Variance<sup>2</sup>:</b> NERC EOP-001-2 requirement R4 states</p>	<p><b>EPCOR</b></p> <p><b>13.</b> EDTI recommends including a list of elements in an appendix applicable to transmission operators similar to Appendix 1 for the ISO.</p>	<p><b>13.</b> Please see AESO Reply 1 above.</p>

<sup>2</sup> An Alberta variance is a change from the US Reliability Standard that the AESO has determined is material.  
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		<p>applicable elements in Attachment 1-EOP-001-0 are to be included in emergency plans. However, the items in Appendix 1 only apply to a capacity and energy emergency as stated in Alberta requirement R5.</p>	<p>This would help clarify and identify operating emergencies requiring a plan (R3)</p>	
<p><b>R5.</b> The Transmission Operator and Balancing Authority shall annually review and update each emergency plan. The Transmission Operator and Balancing Authority shall provide a copy of its updated emergency plans to its Reliability Coordinator and to neighboring Transmission Operators and Balancing Authorities.</p>	<p><b>R7</b> The <b>ISO</b> must review its capacity and energy emergency plan, plans to mitigate operating emergencies on the <b>transmission system</b> and plans for load shedding once every calendar year and update as required.</p>	<p><input type="checkbox"/> New  <input checked="" type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Separated NERC requirement R5 into four requirements (R7-R10) to distinguish responsibilities for updating and distributing emergency plans and to separately identify the responsibilities of the ISO and an operator of a transmission facility.</p> <p>Amended review period to align with other Alberta reliability standards.</p>		
	<p><b>R8</b> Each <b>operator</b> of a <b>transmission facility</b> must review its plans for load shedding once every calendar year and update as required.</p>	<p><input type="checkbox"/> New  <input checked="" type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Separated NERC requirement R5 into four requirements (R7-R10) to distinguish responsibilities for updating and distributing emergency plans and to separately identify the responsibilities of the ISO and an operator of a transmission facility.</p> <p>Amended review period to align</p>		

	<p><b>R9</b> The <b>ISO</b> must provide a copy of its updated capacity and energy emergency plan, plans for load shedding and plans to mitigate operating emergencies on the <b>transmission system</b> to any affected:</p> <p>(a) <b>operator</b> of a <b>transmission facility</b>;</p> <p>(b) adjacent <b>interconnected transmission operator</b>; and</p> <p>(c) adjacent <b>balancing authority</b>, and to the <b>WECC</b> Reliability Coordinator.</p>	<p>with other Alberta reliability standards.</p> <p><input type="checkbox"/> New  <input checked="" type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Separated NERC requirement R5 into four requirements (R7-R10) to distinguish responsibilities for updating and distributing emergency plans and to separately identify the responsibilities of the ISO and an operator of a transmission facility.</p> <p>Amended review period to align with other Alberta reliability standards.</p>		
	<p><b>R10</b> Each <b>operator</b> of a <b>transmission facility</b> must provide a copy of its updated plans to mitigate operating emergencies on the <b>transmission system</b> and plans for load shedding to any affected adjacent <b>operator</b> of a <b>transmission facility</b> and the <b>ISO</b>.</p>	<p><input type="checkbox"/> New  <input checked="" type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Separated NERC requirement R5 into four requirements (R7-R10) to distinguish responsibilities for updating and distributing emergency plans and to separately identify the responsibilities of the ISO and an operator of a transmission facility.</p> <p>Amended review period to align with other Alberta reliability standards.</p>		

<p><b>R6.</b> The Transmission Operator and Balancing Authority shall coordinate its emergency plans with other Transmission Operators and Balancing Authorities as appropriate. This coordination includes the following steps, as applicable:</p> <p><b>R6.1.</b> The Transmission Operator and Balancing Authority shall establish and maintain reliable communications between interconnected systems.</p> <p><b>R6.2.</b> The Transmission Operator and Balancing Authority shall arrange new interchange agreements to provide for emergency capacity or energy transfers if existing agreements cannot be used.</p>		<p><input type="checkbox"/> New  <input type="checkbox"/> Amended  <input checked="" type="checkbox"/> Deleted</p> <p>Deleted NERC EOP-001-2 requirement R6 from the Alberta reliability standard. This requirement is redundant with the adoption of Alberta requirement R5(c).</p> <p><input type="checkbox"/> New  <input type="checkbox"/> Amended  <input checked="" type="checkbox"/> Deleted</p> <p>NERC EOP-001-2 requirement R6.1 will be covered in R1 and R2 of Alberta Reliability Standard COM-001-AB-1.1 that is currently under development.</p> <p><b>Alberta Variance<sup>3</sup>:</b> NERC EOP-001-2 requirement R6.2 is deleted as the ISO enters into operating agreements with adjacent balancing authorities that contain provisions for emergency assistance in accordance with Alberta EOP-001-AB-1 requirement R1. Further, the NERC requirement for arranging new interchange agreements to provide for emergency capacity or energy</p>	<p><b>ATCO</b></p> <p><b>14.</b> Can not locate 4.3 in this standard.</p>	<p><b>14.</b> Please note that the referenced Alberta requirement should be R5(c), not R4.3.</p>
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<sup>3</sup> An Alberta variance is a change from the US Reliability Standard that the AESO has determined is material.  
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<p><b>R6.3.</b> The Transmission Operator and Balancing Authority shall coordinate transmission and generator maintenance schedules to maximize capacity or conserve the fuel in short supply. (This includes water for hydro generators.)</p> <p><b>R6.4.</b> The Transmission Operator and Balancing Authority shall arrange deliveries of electrical energy or fuel from remote systems through normal operating channels.</p>		<p>transfers was not adopted as the ISO uses market mechanism to obtain energy from market participants during emergencies.</p> <p><b>Alberta Variance<sup>4</sup>:</b> NERC EOP-001-2 requirement R6.3 to coordinate transmission and generator maintenance schedules to maximize capacity or conserve the fuel in short supply is not applicable in Alberta as it goes against the market structure in Alberta</p> <p><b>Alberta Variance<sup>5</sup>:</b> NERC EOP-001-2 requirement R6.4 to arrange deliveries of electrical energy or fuel from remote systems through normal operating channels is not applicable in Alberta as it goes against the market structure in Alberta.</p>		
<p><b>M1.</b> The Transmission Operator and Balancing Authority shall have its emergency plans available for review by the Regional Reliability Organization at all times.</p>				
<p><b>M2.</b> The Transmission Operator and Balancing Authority shall have its two most recent annual self assessments available for review by the Regional</p>				

<sup>4</sup> An Alberta variance is a change from the US Reliability Standard that the AESO has determined is material.

<sup>5</sup> An Alberta variance is a change from the US Reliability Standard that the AESO has determined is material.

Reliability Organization at all times.				
	<b>MR1</b> Evidence of having at least one (1) operating agreement with an <b>adjacent balancing authority</b> as required in requirement R1 exists.			
	<b>MR2</b> Evidence of developing, maintaining and implementing a capacity and energy emergency plan as required in requirement R2 exists. Evidence may include a dated, current capacity and energy emergency plan and communications or training to the operating personnel.			
	<b>MR3</b> Evidence of developing, maintaining and implementing plans to mitigate operating emergencies on the <b>transmission system</b> as required in requirement R3 exists. Evidence may include dated, current plans to mitigate operating emergencies on the <b>transmission system</b> and communications or training to the operating personnel.			
	<b>MR4</b> Evidence of developing, maintaining and implementing load shedding plans as required in requirement R4 exists. Evidence may include dated, current plans for load shedding and communications or training to the operating personnel.			

	<p><b>MR5</b> Evidence of including the items in emergency plans as required in requirement R5 exists. Evidence may include emergency plans that contain items listed in requirement R5.</p>			
	<p><b>MR6</b> Evidence of considering the elements in Appendix 1 as required in requirement R6 exists. Evidence may include documentation indicating which elements from Appendix 1 were not included in the capacity and emergency plan and the rationale why they were not included.</p>			
	<p><b>MR7</b> Evidence of reviewing and updating each plan as required in requirement R7 exists. Evidence may include documentation confirming each plan was reviewed once every calendar year and updated as required.</p>			
	<p><b>MR8</b> Evidence of reviewing and updating plans as required in requirement R8 exists. Evidence may include documentation confirming each plan was reviewed once every calendar year and updated as required.</p>			
	<p><b>MR9</b> Evidence of providing each updated plan as required in requirement R9 exists. Evidence may include email or mail to appropriate recipients that identifies contents submitted.</p>			

	<b>MR10</b> Evidence of providing updated plans as required in requirement R10 exists. Evidence may include email or mail to appropriate recipients that identifies contents submitted.			
<b>Compliance</b> To view the compliance section D of the NERC reliability standard follow this link: <a href="http://www.nerc.com/files/BAL-002-0.pdf">http://www.nerc.com/files/BAL-002-0.pdf</a>		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: <a href="http://www.aeso.ca/loadsettlement/17189.html">http://www.aeso.ca/loadsettlement/17189.html</a>		
Regional Differences None identified.	None identified.	Not applicable in Alberta		

## Appendix 1<sup>7</sup>

### Elements for Consideration in Development of Capacity and Energy Emergency Plan

1. **Bulk electric system** energy use — The reduction of the **bulk electric system's** own energy use to a minimum.
2. Public appeals — Appeals to the public through all media for voluntary load reductions and energy conservation including educational messages on how to accomplish such load reduction and conservation.
3. Load management — Implementation of load management and voltage reductions, if appropriate.
4. Interruptible and curtailable loads — Use of interruptible and curtailable load to reduce capacity requirements or to conserve the fuel in short supply.
5. Maximizing **generating unit** output and availability — The operation of all generating sources to maximize output and availability. This should include plans to winterize **generating units** and **aggregated generating facilities** during extreme cold weather.
6. Notifying independent power producers (IPP) — Notification of cogeneration and independent power producers to maximize output and availability.
7. Requests of government — Requests to appropriate government agencies to implement programs to achieve necessary energy reductions.
8. Load curtailment — A mandatory load curtailment plan to use as a last resort. This plan should address the needs of critical loads essential to the health, safety and welfare of the community. Address firm load curtailment.
9. Notification of government agencies — Notification of appropriate government agencies as the various steps of the operating emergency plan are implemented.
10. Notifications to operating entities — Notifications to other operating entities as steps in the operating emergency plan are implemented.

<sup>7</sup> Alberta Variance – Deleted some elements in Appendix 1 that are to be considered when developing an emergency plan as these elements (fuel supply and inventory, fuel switching, optimize fuel supply and appeals to customers to use alternate fuels) are managed through the market structure in Alberta. An Alberta variance is a change from the US Reliability Standard that the AESO has determined is material.