



Stakeholder Comment and Rationale Form

AESO AUTHORITATIVE DOCUMENT PROCESS

**Stakeholder Consultation Draft
2010-06-11**

Alberta Reliability Standard – VAR-002-AB-1.1b Generator Operation for Maintaining Network Voltages

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>2010-06-11</u> Period of Consultation [yyyy/mm/dd]: <u>2010-06-11</u> through <u>2010-07-09</u> Comments From: <u>Capital Power</u> Date [yyyy/mm/dd]: <u>2010-07-09</u>	Contact: <u>Jerry Mossing</u> Phone: <u>403-539-2496</u> E-mail: <u>ars_comments@ieso.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 underneath (if any).

1. Definitions	Comments	Rationale and/or Alternate Proposal
(a) New "aggregated generating facilities" means an aggregation of generating units, including any reactive power resources, which are: (i) designated by the ISO; and (ii) situated in the same proximate location at one or more point of connections.	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose <i>Insert Comments / Reason for Position (if any)</i>	



1. Definitions	Comments	Rationale and/or Alternate Proposal
<p>“voltage regulating system” means the equipment that automatically controls the reactive power resources to regulate the voltage level at any collector bus.</p>	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose <i>Insert Comments / Reason for Position (if any)</i>	
<p>(b) Removals</p>	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose <i>Insert Comments / Reason for Position (if any)</i>	
<p>(c) Amendments</p>	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose <i>Insert Comments / Reason for Position (if any)</i>	
2. Alberta Reliability Standards	Comments	Rationale and/or Alternate Proposal
<p>(a) New Alberta Variances</p> <p>The provisions within the proposed Alberta Reliability Standard VAR-002-AB-1.1b Generator Operation for Maintaining Network Voltages are derived from NERC VAR-002-1.1b with suitable revisions for the responsible entities within Alberta. An Alberta variance is a change from the NERC Reliability Standard that the AESO has determined is material. Specifically, the following provisions have been added, replacing existing NERC VAR-002-1.1b requirements.</p>		
<p>R1. Each operator of a generating unit, subject to requirement R3 and the ISO’s consent to operate otherwise, must operate such generating unit with the automatic voltage regulator in service and in voltage control mode and must not operate in any other mode including without limitation,</p>	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose	<p>If the purpose of splitting the single NERC requirement into three separate requirements is to increase clarity and understanding of the obligation, this would</p>



2. Alberta Reliability Standards	Comments	Rationale and/or Alternate Proposal
<ul style="list-style-type: none"> • power factor control mode • VAR control mode 	<p>Capital Power does not support the AESO’s decision to split Requirement 1 of the NERC Reliability Standard into three Requirements in the Alberta version of the Reliability Standard. In principle it does not make sense to have a single requirement under NERC generate multiple requirements in Alberta. This creates an additional risk for Alberta market participants of violating multiple requirements for an action that would only result in one infraction under the NERC version. The AESO has stated that, where possible, there should be symmetry between the NERC and Alberta versions of Reliability Standards.</p> <p>In the event that the NERC standard has separate conditions within a single requirement, the AESO version should be consistent, particularly in cases where the requirements are dependent on each other. For example, in this standard an operator of a generating unit is required to comply with R1 or R3. Therefore, these conditions must be listed within a single requirement separated by an “or”, as that would accurately reflect the fact that operators are not required to comply with both requirements simultaneously but rather the two are mutually exclusive.</p> <p>In addition the increased obligation placed on Alberta market participants to obtain the “ISO’s consent” to operate the plant without the automatic voltage regulator in service and in voltage control mode is unnecessary and</p>	<p>be better achieved by using multiple bullet points within the same requirement as has been the practice for other Alberta Reliability Standards.</p> <p>The Alberta version should align with the NERC version in terms of obligation. Alberta market participants should only be required to notify the ISO if the automatic voltage regulator is not in service or operating in voltage control mode.</p>

2. Alberta Reliability Standards	Comments	Rationale and/or Alternate Proposal
	<p>appears to be unjustified. The NERC version of this requirement simply states that the Generator Operator must notify the Transmission Operator if the unit will be operating in some other mode and does not require consent or approval from any party.</p>	
<p>R2. Each operator of a wind aggregated generating facility, subject to requirement R3 and the ISO's consent to operate otherwise, must operate such wind aggregated generating facility with the voltage regulating system in service and in voltage control mode and must not operate in any other mode including without limitation,</p> <ul style="list-style-type: none"> • power factor control mode • VAR control mode 	<p> <input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose </p> <p>See comments for R1</p>	
<p>R3. Each operator of a generating unit or wind aggregated generating facility must notify the ISO as soon as practical when the automatic voltage regulator or voltage regulating system is out of service.</p>	<p> <input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose </p> <p>See comments for R1.</p> <p>Capital Power would like the AESO to clarify what is considered "as soon as practical".</p> <p>Also the AESO should indicate which department of the AESO should be notified to ensure the information is communicated appropriately.</p>	
<p>R4. The operator of a generating unit or wind aggregated generating facility unless exempted by the ISO must comply with directives from the ISO that specify the following:</p> <ol style="list-style-type: none"> a) voltage level on the high voltage side of the transformer(s) at the point of connection between each generating unit or wind aggregated generating facility and the TFO's facilities; or b) the reactive power to be achieved by the generating unit or wind 	<p> <input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose </p> <p>See comments for R1.</p> <p>Capital Power does not support the AESO's</p>	<p>If the purpose of splitting the requirement into two separate sub-requirements is to increase clarity and understanding of the obligation, this would be better achieved by using multiple bullet points within the same requirement, as has been done for other</p>



2. Alberta Reliability Standards	Comments	Rationale and/or Alternate Proposal
<p>aggregated generating facility.</p> <p>R4.1 Each operator of a generating unit or wind aggregated generating facility pursuant to requirement R4 must comply by adjusting the:</p> <ul style="list-style-type: none"> a) set point of the automatic voltage regulator or voltage regulation system; or b) on-load tap changer. <p>R4.2 The operator of a generating unit or wind aggregated generating facility, subsequent to complying pursuant to requirement R4, must not adjust either of the following:</p> <ul style="list-style-type: none"> a) set point of the automatic voltage regulator or voltage regulating system; or b) on-load tap changer. 	<p>proposal to add two sub-requirements (R4.1 and R4.2) to the Alberta version of this standard when the NERC version has only a single requirement. Alberta Reliability Standards will be enforced at the sub-requirement level and therefore market participants are at risk of facing multiple penalties for an infraction that would only result in one violation in NERC jurisdictions.</p> <p>In Decision 2009-183, issued on June 24, 2010 the AUC determined that the PPAs are considered enactments and therefore have the force of regulation. As a result the AESO cannot make rules or standards that are not consistent with the PPA. The AESO must recognize that the PPAs state the MVAR limits of the respective generating units and that these limits are not necessarily those shown on the Generator “D” curve. The AESO must respect these limits and avoid issuing directives that would cause unnecessary strain on the unit, should these limits be breached.</p>	<p>Alberta Reliability Standards.</p>

2. Alberta Reliability Standards	Comments	Rationale and/or Alternate Proposal
<p>R5 Each operator of a generating unit or wind aggregated generating facility must use an alternative method to control voltage and reactive power output to meet the voltage level directive, or reactive power level directive issued by the ISO when the automatic voltage regulator or voltage regulating system is out of service.</p>	<p> <input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose </p> <p>MR5 states that to be compliant with R5, market participants must “show that voltage levels are within tolerances”. R5 however does not clearly indicate what the allowable “tolerances” are.</p>	
<p>R6. Each operator of a generating unit or wind aggregated generating facilities who cannot comply with a directive pursuant to requirement R5 must notify the ISO with its explanation for not complying with a voltage level directive within 30 minutes.</p>	<p> <input type="checkbox"/> Support <input checked="" type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose </p>	<p>The wording should be changed from ISO to system controller to be clear about who the message should be communicated to.</p>
<p>R7. Each operator of a generating unit or wind aggregated generating facility must notify the ISO as soon as practical, but within 30 minutes of any of the following:</p> <p>R7.1. A status or capability change on any generating unit or wind aggregated generating facility reactive power resource in excess of 2.5 MVar or 1% (which ever is greater) of its reactive power obligation, including the status of each automatic voltage regulator, voltage regulating system and power system stabilizer, and the expected duration of the change in status or capability.</p> <p>R7.2 A status or capability change on any other reactive power resource in excess of 2.5 MVar or 1% (which ever is greater) of the reactive power obligation under the control of each operator of a generating unit or operator of a wind aggregated generating facility , and the expected duration of the change in status or capability.</p> <p>R7.3 A status or capability change of the reactive power resource of an unknown value. Once the value is known then operator of generating unit must report the value to the ISO as soon as practical, but within 30 minutes.</p>	<p> <input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose </p> <p>See comments for R1.</p> <p>Capital Power does not support the AESO proposal to add the sub-requirement R7.3 in the Alberta version when the NERC version only has two sub-requirements. Alberta Reliability Standards will be enforced at the sub-requirement level, and therefore market participants are at risk of facing multiple penalties for an infraction that would only result in one violation in NERC jurisdictions.</p>	<p>The additional information should be included in the original sub-requirements rather than adding a new sub-requirement.</p>
<p>R8. Each GFO with generating unit step-up and auxiliary transformers with primary voltages equal to or greater than the generating unit terminal</p>	<p> <input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions </p>	<p>MR8 – Evidence that the information was provided in the timeline specified in</p>



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<p>voltage must provide the ISO any one or more of the following within 30 days of a request:</p> <p>R8.1 Tap settings.</p> <p>R8.2 Available fixed tap ranges.</p> <p>R8.3 Impedance data.</p> <p>R8.4 The +/- voltage range with step-change in % for on-load tap changing transformers.</p>	<p><input checked="" type="checkbox"/> Oppose</p> <p>MR8 states that a market participant must have “Confirmation that the information was provided in the timeline specified in R8”. It is unreasonable and inappropriate to make market participants responsible for the actions of another party, in this case the AESO. It is not appropriate to place an obligation on a market participant that would put it at risk of being found non-compliant if the ISO does not provide a requested confirmation.</p> <p>In addition, the AESO has suggested that a confirmation of receipt is not absolutely necessary but market participants must at least show a concerted attempt to receive confirmation. If this is the intent of the measure then Capital Power does not see the necessity of the confirmation at all. The NERC version of the standard requires the generator owner to provide evidence that the information was provided. This is all that a market participant can reasonably be responsible for.</p> <p>In order to identify the information requests related to this standard (VAR-002-AB-1) R8, the standard should be referenced in the specific information requests to enable clear tracking for audit purposes.</p>	<p>requirement R8.</p>
<p>R9. Each GFO with step-up transformer off-load taps, after reviewing with the ISO, must ensure that transformer tap positions are changed according to the specifications provided by the ISO.</p>	<p><input type="checkbox"/> Support</p> <p><input checked="" type="checkbox"/> Support with language suggestions</p> <p><input type="checkbox"/> Oppose</p> <p>Only the operator of a generating unit would be</p>	<p>The wording of this standard should be changed to apply to operators of generating units rather than generating facility owners.</p>

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	<p>able to ensure that the generating unit is compliant with this requirement. For the standards to be fair and enforceable the compliance obligation must be directed at the party who has the ability to control physical compliance.</p> <p>At a minimum, the requirement should have embedded in it, a due diligence defense for the GFO similar to that in ISO Rule 6.6 Pool Participant Non Compliance with Energy Market Dispatches since the action or inaction is out of the control of the GFO.</p>	
<p>R10. Each GFO must notify the ISO within 30 days of the ISO providing the specifications pursuant to requirement R9 if the GFO cannot comply and must include the technical justification in such notice.</p>	<p> <input type="checkbox"/> Support <input checked="" type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose </p> <p>See comment for R9.</p> <p>R10 states that a market participant must provide the technical justification for why a generating unit may not be able to comply with the ISO's specifications, however MR10 states that documentation must show an "acceptable explanation" was provided. It is not clear what would constitute an "acceptable explanation", or which party would be making that determination.</p> <p>In principle measures are not intended to and should never place additional obligations on market participants. In this case, MR10 places an additional requirement on the market participant to determine if the technical justification provided is</p>	<p>The wording of this standard should be changed to apply to operators of generating units rather than generating facility owners.</p> <p>MR10 should be amended to say "Documentation exists and shows that the technical justification was provided within the timelines specified in requirement R10."</p>



2. Alberta Reliability Standards	Comments	Rationale and/or Alternate Proposal
	acceptable. Furthermore, it is not clear if this is under the control of the market participant.	
(b) Removals (Alberta Variances)	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose <i>Insert Comments / Reason for Position (if any)</i>	
(c) Amendments (Alberta Variances) The following revisions have been made throughout this proposed reliability standard: <ul style="list-style-type: none"> - Identified the responsible entities in Alberta. - Applied a consistent writing style and added clarity. - Changed passive terms such as “shall” to “must”. - Developed measures specific to the requirements. 	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose <i>Insert Comments / Reason for Position (if any)</i>	
(d) Other <i>(Stakeholders wishing to comment on specific provisions are requested to copy the provision into this area and provide comments)</i>	Double Jeopardy concern – OPP 702 specifies identical requirements to those contained in this standard. We raised this issue with regard to CIP-001 and OPP 808 and it is our view that Market participants should not be put at risk of being found non-compliant with multiple authoritative documents for a single action or inaction. Capital Power does not support the approval of this standard without the simultaneous removal of these provisions from OPP 702.	