

November 25, 2011

Dear Market Participants and Interested Parties:

**RE: AESO Reply to Stakeholder Comments on Second Consultation for Proposed Alberta Reliability Standard:
Protection and Control *Disturbance Monitoring Equipment Installation and Data Reporting*
PRC-018-AB-1
("PRC-018-AB-1 Draft 2.1")**

Section 19 of the *Transmission Regulation* requires the Alberta Electric System Operator ("AESO") to consult with market participants likely to be directly affected by the AESO's adoption or making of reliability standards, and also requires the AESO to forward proposed reliability standards to the Alberta Utilities Commission ("Commission") for review along with the AESO's recommendation that the Commission approve or reject them.

Accordingly, the AESO issued a [Stakeholder Consultation Letter](#) on September 27, 2011 providing notice and seeking further comments from market participants on proposed PRC-018-AB-1 Draft 2.1.

The AESO's reply is set out in the attached AESO Replies document, and a summary of the stakeholder comments received and the AESO's reply to these comments is included below.

In addition, the final proposed PRC-018-AB-1 Draft 2.1 ("Final Proposed PRC-018-AB-1 Draft 2.1") is attached.

Summary of proposed PRC-018-AB-1 Draft 2.1

Please see the AESO's September 27, 2011 Stakeholder Consultation Letter for a summary of proposed PRC-018-AB-1 Draft 2.1.

AESO Reply to Market Participant Comments

The written comments received by the AESO in response to proposed PRC-018-AB-1 Draft 2.1 attached to its September 27, 2011 Stakeholder Consultation Letter and the AESO's replies to these comments are summarized below:

1. A stakeholder suggested that "the legal owner of a generating unit" be removed from the applicability. In response to this comment, the AESO replied that it disagreed as the definition of "generating unit" also includes "switch yards" and there may be a need at some point to install disturbance monitoring equipment at this type of facility. This applicability is also aligned with the NERC applicability. The requirement to install disturbance monitoring equipment will be determined by the AESO such that disturbance data can be reported;
2. Certain stakeholders questioned who bears the cost for generators that may be required to have disturbance monitoring equipment. In response to these comments, the AESO replied that cost recovery is outside of the scope of the development of the Alberta reliability standards;
3. Stakeholders questioned how this reliability standard would apply to future locations of disturbance monitoring equipment (DME) when the reliability standard only applies to disturbance monitoring equipment on the list. In response to these comments, the AESO stated that it would update the disturbance monitoring locations list, as required, by adding new locations. The Alberta reliability standard will then apply to the applicable market participant as of the effective date identified on the updated list;

4. A stakeholder noted that the disturbance monitoring list is inconsistent with the list provided by the AESO titled “AESO WISP with Summary.pdf” regarding WECC’s list of sites regarding disturbance monitoring installations. In response to this comment, the AESO replied that the disturbance monitoring locations list has been developed based on WECC’s original requirements, and that, in the future, the AESO will consider adding additional locations;
5. A stakeholder was concerned that there is no mention of a timeline for implementation requirements for new additions to the list of disturbance monitoring equipment. In response to this comment, the AESO agreed that adequate implementation time should be provided to install disturbance monitoring equipment. Accordingly in future, the AESO with input from the affected market participant will determine the effective date for new disturbance monitoring equipment locations in accordance with the amending procedures contained in the Disturbance Monitoring Equipment Locations document;
6. Stakeholders commented that the AESO is in full control of disturbance monitoring equipment [specifications](#) and setup in Alberta and as such disturbance monitoring equipment owners cannot prove any data storage capability. As well, these stakeholders argued that the AESO sets up disturbance monitoring equipment in Alberta for continuous data streams only; and that the data file is deleted from the personal computer where it is temporarily stored once it is transferred successfully to AESO. In response to these comments, the AESO replied that it agreed with stakeholders, and accordingly, has amended Alberta requirement R2.2 (now R3) from Final Proposed PRC-018-AB-1 Draft 2.1 by assigning this requirement to the AESO;
7. A stakeholder suggested that the reference to internal clocks in Alberta requirement R2 be removed. In response to this comment, the AESO replied that all disturbance monitoring equipment have internal clocks, and that these internal clocks must be synchronized such that disturbance records are correctly time stamped. In the AESO’s opinion, the use of an external GPS clock providing an IRIG-B signal is the most practical approach to ensure the devices internal clock is within 2ms;
8. A stakeholder requested that the AESO align the numbering in proposed PRC-018-AB-1 Draft 2.1 to match the NERC numbering. In response to this comment, the AESO replied that it does not agree to make this change, as the AESO’s current Alberta reliability standards drafting principles include that when; (i) a NERC/WECC requirement is applicable to two or more entities based on Alberta’s division of responsibility within the Alberta reliability framework (i.e. data reporting to the WECC where a market participant must first provide information to the AESO who then provides such data to the WECC); or (ii) a NERC/WECC requirement contains two or more separate and distinct obligations; then the NERC/WECC requirement is split into two separate requirements which are kept within proximity to one another as they are related requirements;
9. A stakeholder expressed concern that with a compliance deadline of forty-five (45) days the AESO may be holding itself and Alberta entities to a difficult level of compliance if the AESO receives the request from WECC during a self-certification cycle or audit as it pertains to providing information on disturbance monitoring equipment. In response to this comment, the AESO replied that it is the AESO’s opinion that the time periods set forth in Alberta requirements R4 (now R5) and R5 (now R6), are reasonable given the nature of the information being requested. The time period was included to add clarity and to make Alberta requirement R6 measurable;
10. A stakeholder asked, if the AESO accesses the data directly, without intervention from the owner, how will the owner satisfy the requirement that data has been provided within 30 days of the request? In response to this comment, the AESO replied that it only anticipates using Alberta requirement R7 upon an extended communication failure, and has amended and added clarity to Alberta requirement R7 in Final Proposed PRC-018-AB-1 Draft 2.1 so that the market participant is to provide all [available](#) recorded disturbance data;
11. A stakeholder was concerned that a compliance deadline of thirty (30) days to provide disturbance monitoring data to the AESO as required in Alberta requirement R6 (now R7), may be holding the Alberta entities to a difficult level of compliance. In response to this comment, the AESO agreed with the stakeholder and has amended Alberta requirement R7 in Final Proposed PRC-018-AB-1 Draft 2.1 to allow 45 (forty-five) days to provide this data to the AESO;

12. A stakeholder was concerned that Alberta requirement R6 (now R7), may be in conflict with Alberta requirement R2.2 (now R3). In response to this comment, the AESO replied that both of these requirements have been amended in Final Proposed PRC-018-AB-1 Draft 2.1 such that the AESO is now taking responsibility for Alberta requirement R2.2 (now R3), and only when the AESO is unable to directly access disturbance data must market participants provide all available disturbance data under Alberta requirement R6 (now R7);
13. Stakeholders requested clarification of measures and the type of evidence required. In response to these comments, the AESO indicated that the measures were amended in Final Proposed PRC-018-AB-1 Draft 2.1, and explanations related to those amendments were provided in the attached AESO Replies to the September 27, 2011 Stakeholder Consultation Letter;
14. A stakeholder commented that the effective date for the new draft of the *Disturbance Monitoring Equipment Locations* document should be changed to be consistent with the effective date of Proposed PRC-018-AB-1 Draft 2.1. In response to this comment, the AESO agreed with the stakeholder and the effective dates in the table for disturbance monitoring equipment locations have been revised to reflect the effective date of Final Proposed PRC-018-AB-1 Draft 2.1; and
15. A stakeholder commented that the reference to the Empress 394S location was incorrect and should be changed to Empress 163S. In response to this comment, the AESO agreed with the stakeholder, and accordingly, a disturbance monitoring equipment location in the list of disturbance monitoring equipment locations was changed from Empress 394S to Empress 163S.

Additional Changes to the Final Proposed PRC-018-AB-1 Draft 2.1

The following summarizes additional amendments made to the Final Proposed PRC-018-AB-1 Draft 2.1 as a result of AESO Review:

1. Alberta requirement R5 was amended to remove maintain data and to replace data with information. These amendments were made as the reporting of disturbance monitoring equipment information to the AESO is the important element to capture in this requirement;

Forwarding Final Proposed PRC-018-AB-1 Draft 2.1 to the Commission

Pursuant to Section 19 of the *Transmission Regulation*, the AESO intends to forward Final Proposed PRC-018-AB-1 Draft 2.1 to the Commission on December 7, 2011, with the AESO's recommendation that the Commission approve Final Proposed PRC-018-AB-1 Draft 2.1 as an Alberta Reliability Standard.

Final Proposed PRC-018-AB-1 Draft 2.1 is proposed to be effective on October 1, 2012.

Attachments to AESO Reply

1. [AESO Replies](#) to the September 27, 2011 Stakeholder Consultation Letter, including stakeholder comments and blacklined version of the Final Proposed PRC-018-AB-1 Draft 2.1;
2. [Clean](#) copy of Final Proposed PRC-018-AB-1 Draft 2.1; and
3. [Copy](#) of the Disturbance Monitoring Equipment Locations document provided for reference.

Yours sincerely,

Original Signed By

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Attachments