



July 15, 2010

Dear Market Participants and Interested Parties:

**Re: Letter of Notice – Protection and Control (“PRC”) Reliability Standard Proposed for Adoption as Alberta Reliability Standard:**  
**a) PRC-023-AB-1 Transmission Relay Loadability**  
**b) New Definition for Incorporation into AESO Consolidated Authoritative Documents Glossary.**  
**(collectively “Proposed Reliability Standard”)**

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

Accordingly, the AESO is providing notice and seeking comments from market participants on the attached Proposed Reliability Standard.

Following the AESO’s receipt of and reply to comments from market participants regarding the Proposed Reliability Standard, the AESO intends to finalize the Proposed Reliability Standard and forward it to the AUC for review and approval as a reliability standard that applies in Alberta.

### **Applicability of the Proposed Reliability Standard**

The Proposed Reliability Standard is applicable to:

- TFOs with load-responsive phase protection systems, as described in Attachment A of the Proposed Reliability Standard, and with any of the facilities defined below:
  - transmission lines operated at 200 kV and above.
  - transmission lines operated at 100 kV to 200 kV as identified by the ISO as critical to the reliability of the Bulk Electric System (BES) as required in requirement R3.
  - transformers with low voltage terminals connected at 200 kV and above.
  - transformers with low voltage terminals connected at 100 kV to 200 kV as designated by the ISO as critical to the reliability of the BES;
- and the AESO



## Summary of the Proposed Reliability Standard

The purpose of the Proposed Reliability Standard is to ensure the protective relay settings do not limit transmission loadability, do not interfere with system operators ability to take remedial action to protect system reliability, and are set to reliably detect all fault conditions and protect the electrical network from these faults.

The Proposed Reliability Standard has been amended to contain certain “Alberta variances” from the NERC standards. These variances have been included to ensure the Proposed Reliability Standard properly aligns with the industry structure in Alberta and is capable of being applied in Alberta. A summary of these variances are as follows:

- a) Reliability Coordinator is not included in Alberta requirement R2. NERC requirement R2 states that agreement shall be obtained from the Planning Coordinator, Transmission Operator, and Reliability Coordinator. The AESO is the authority from which TFOs and GFOs will obtain agreement for the calculated circuit capability and the AESO will consult with the WECC Reliability Coordinator at its discretion.

The new defined term “planning coordinator” is also being proposed for use in the Proposed Reliability Standard. At the date of approval by the AUC of the Proposed Reliability Standard, the AESO will include this proposed new definition in the AESO Consolidated Authoritative Documents Glossary.

Further, as part of the AESO’s process to adopt Alberta reliability standards, the Proposed Reliability Standard has been amended to change passive terms such as “shall” to “must”, to apply a consistent writing style, to clarify requirements, and to ensure that measures are appropriately aligned with requirements.

## Implementation of Alberta Reliability Standards

All reliability standards proposed for approval or rejection by the AESO are based on the reliability standards and definitions developed, or approved, and enforced by the North American Electric Reliability Corporation (“NERC”). NERC was certified as the Electric Reliability Organization (“ERO”) for the United States by the Federal Energy Regulatory Commission (“FERC”) under the US *Energy Policy Act of 2005*. NERC has been granted recognition as the ERO by the Minister of Energy in Alberta pursuant to Section 20 of the *Transmission Regulation*.

In accordance with Section 19 of the *Transmission Regulation*, the reliability standards that apply in Alberta are those of the ERO or any other reliability standards to the extent that such reliability standards are adopted by the AESO after consultation with market participants and after receipt of Commission approval.

Further information regarding the AESO’s adoption of reliability standards is available on the AESO website at <http://www.aeso.ca/rulesprocedures/17004.html> .



## **AESO Papers and Other Related Communications**

The AESO has not issued any AESO papers or other related communications with respect to the Proposed Reliability Standard.

## **Request for Stakeholder Comments**

Comments and suggestions on the Proposed Reliability Standard are encouraged.

The attached Stakeholder Comparison Comment Rationale Matrix sets out the following:

- a) the complete text of NERC PRC-023-1, with the exception of the compliance section D. 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>. For information, a link is provided to NERC compliance section D in the Stakeholder Comparison Comment Rationale Matrix;
- b) the proposed Alberta requirements and measures;
- c) the AESO's rationale with regard to any Alberta variances or other modifications to the NERC wording;
- d) new defined terms;
- e) a 'stakeholder comments' section to be used by market participants when providing written comments to the AESO; and
- f) an 'AESO replies' section that will be used by the AESO to respond to comments received from market participants, if any.

Please use the attached Stakeholder Comparison Comment Rationale Matrix when submitting comments to the AESO on the Proposed Reliability Standard. Only written comments will be considered by the AESO in finalizing the proposed Reliability Standards.

Please provide written stakeholder comments or questions by **August 15, 2010** to Jerry Mosing at [ars\\_comments@aeso.ca](mailto:ars_comments@aeso.ca).

The AESO will be publishing all stakeholder comments received for industry review shortly after the comment deadline. Stakeholder Comments received along with AESO replies to the comments will be published with the final proposed Reliability Standards being recommended for internal AESO approval in September, 2010.



## Attachments to Letter of Notice

The following document is attached to this Letter of Notice:

1. [Stakeholder Comparison Comment Rationale Matrix](#)

The full text of all NERC reliability standards, is available on the NERC website:  
<http://www.nerc.com/page.php?cid=2|20>

## Proposed Effective Date

Requirements R1 and R2 for transmission lines operated at 200kV and above and transformers with low voltage terminals connected at 200kV and above, except for switch-on-to-fault schemes, are proposed to become effective the beginning of the first calendar quarter following ninety (90) days after the date of approval by the Commission.

Requirements R1 and R2 for transmission lines operated at 100 kV to 200 kV as identified by the ISO as critical to the reliability of the BES and transformers with low voltage terminals connected at 100 kV to 200 kV as designated by the ISO as critical to the reliability of the BES, including switch-on-to-fault schemes, are proposed to become effective on the first day of the month after the 39<sup>th</sup> full month following the date of approval by the Commission.

Requirement R3, is proposed to become effective the first day of the month after the 18<sup>th</sup> full month following the date of approval by the Commission.

Yours sincerely,

*Original Signed By*

Paul Glatthor  
Manager, Authoritative Documents Process  
Ph: (403) 539-2464  
E-mail: [paul.glatthor@aeso.ca](mailto:paul.glatthor@aeso.ca)

Attachments