

June 21, 2018

To: Market Participants and Other Interested Parties

Re: **Consultation Letter – Proposed New Alberta Reliability Standard PRC-019-AB-2, Coordination of Generating Unit or Plant Capabilities, Voltage Regulating Controls, and Protection (“proposed PRC-019-AB-2”)**

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 Alberta reliability standards, and also requires the AESO to forward the proposed Alberta reliability standards to the Alberta Utilities Commission (“AUC” or “Commission”) for review along with the AESO’s recommendation that the Commission approve or reject them.

Accordingly, the AESO is providing notice and seeking comments from market participants on the attached proposed PRC-019-AB-2.

Applicability

Proposed PRC-019-AB-2 is applicable to:

- (a) the legal owner of a transmission facility that owns a synchronous condenser greater than 20 MVA (gross nameplate rating) directly connected to the transmission system;
- (b) the legal owner of a generating unit whose generating unit has a maximum authorized real power rating greater than 18 MW that is:
 - (i) directly connected to the transmission system;
 - (ii) directly connected to transmission facilities within the City of Medicine Hat; or
 - (iii) part of an industrial complex that is directly connected to the transmission system;
- (c) the legal owner of a generating unit whose generating unit is within a power plant that has a combined maximum authorized real power rating greater than 67.5 MW and that:
 - (i) is not part of an aggregated generating facility; and
 - (ii) is directly connected to the transmission system or to transmission facilities within the City of Medicine Hat.
- (d) the legal owner of an aggregated generating facility that has a maximum authorized real power rating greater than 67.5 MW, where voltage regulating control for the facility is performed solely at the individual generating units of the aggregated generating facility, and the aggregated generating facility is:
 - (i) directly connected to the transmission system;
 - (ii) directly connected to transmission facilities within the City of Medicine Hat; or
 - (iii) part of an industrial complex that is directly connected to the transmission system;
- (e) the legal owner of a generating unit whose generating unit is a blackstart resource; and

- (f) the legal owner of a generating unit, the legal owner of a aggregated generating facility and the legal owner of a transmission facility whose resource is material to this reliability standard and to the reliability of either the interconnected electric system or the City of Medicine Hat electric system as the AESO determines and includes on a list published on the AESO website, which the AESO may amend from time to time in accordance with the process set out in Appendix 1 of proposed PRC-019-AB-2.

Background

The purpose of proposed PRC-019-AB-2 is to periodically verify coordination of generating unit or synchronous condenser (SC) voltage regulating controls, limit functions, equipment capabilities, and protection system settings. Proposed PRC-019-AB-2 will ensure that generating units/SC facilities will not trip off-line as a result of improper coordination between generating unit/SC protective relays, and generating unit/SC voltage regulator controls and limit functions.

Summary of Proposed Changes

In developing proposed PRC-019-AB-2, the AESO determined that certain Alberta variances and administrative amendments were required in order to ensure that North American Electric Reliability Corporation (“NERC”) PRC-019-2, *Coordination of Generating Unit or Plant Capabilities, Voltage Regulating Controls, and Protection* (“NERC PRC-019-2”) is capable of being applied in Alberta and does not require a material change in the framework for the market for electric energy. A summary of these Alberta variances and administrative amendments are as follows:

Alberta variances:

- the “Applicability” section has been amended to ensure proposed PRC-019-AB-2 is capable of application in Alberta.

Administrative amendments:

- Requirement R1 has been restructured to focus on verifying the coordination items of each facility described in R1 (a) and (b), which pertain to in-service limiters , protection systems and generating unit/SC capability; and
- requirement R2(b) has been added to clarify the difference between the unanticipated changes, described in requirement R2(a), and planned changes. It is important that the required coordination is performed for planned changes prior to electrically connecting the generating unit /SC in order to ensure reliable operation of the generating unit/SC.

In addition, the AESO made amendments to ensure consistent use of defined terms as included in the AESO’s [Consolidated Authoritative Document Glossary](#) (“CADG”). Administrative changes, such as formatting and grammatical corrections, have also been made in proposed PRC-019-AB-2.

Defined Terms

When reviewing the attached proposed PRC-019-AB-2 market participants should note that all defined terms appear **bolded**. Market participants and other interested parties are encouraged to refer to the AESO’s CADG when reviewing proposed Alberta reliability standards to ensure they have an accurate understanding of those defined terms.

Implementation of Alberta Reliability Standards

In accordance with Section 19 of the *Transmission Regulation*, the reliability standards that apply in Alberta are those of the Electric Reliability Organization (“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. The NERC was certified as the ERO for the United States by the Federal Energy Regulatory Commission under the US *Energy Policy Act* of 2005. Further, the NERC was recognized as the ERO by the Minister of Energy in Alberta.

Alberta reliability standards and definitions proposed for approval or rejection by the AESO are developed:

- (a) based on the reliability standards and definitions of the NERC; or
- (b) to amend, supplement or replace the NERC reliability standards or definitions.

For more information on the AESO's reliability standards, visit the AESO website at www.aeso.ca and follow the path Rules, Standards and Tariff > Alberta Reliability Standards.

Request for Comment

Please use the attached Market Participant Comment Matrix when submitting comments to the AESO. Only written comments will be considered in finalizing proposed PRC-019-AB-2. Market participants should ensure that comments provided represent all interests within their organization. The scope of comments is limited to proposed PRC-019-AB-2. Any comments received that are outside of this scope will not be considered by the AESO.

Market participants are asked to provide comments no later than **July 12, 2018** to ars_comments@aesoc.ca. Adherence to deadlines is essential to the integrity of the Alberta reliability standard comment process. As such, any market participant comments received after July 12, 2018 may not be published, replied to, or otherwise considered by the AESO.

The AESO will be publishing all comments received for industry review in July 2018. The AESO expects to publish replies to the comments with the final proposed PRC-019-AB-2 in August 2018.

If the AESO does not receive comments regarding proposed PRC-019-AB-2 the AESO expects to forward proposed PRC-019-AB-2 to the Commission in August 2018, along with its recommendation that the Commission approve the proposed PRC-019-AB-2, to become effective the first day of the calendar quarter (January 1, April 1, July 1 or October 1) that follows eight full calendar quarters after approval by the Commission.

Attachments to Consultation Letter

The following documents are attached:

- 1. [Market Participant Comment Matrix](#) for proposed PRC-019-AB-2; and
- 2. [Clean copy](#) of proposed PRC-019-AB-2.

Sincerely,

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Attachments