## September 10, 2015

Re: ISO Rule Section 502.11 (Substation) Workgroup Meeting – Proposed Agenda

Date: September 17, 2015 Time: 10:00 am to 3:00 pm

Location: Room 1530 (15th floor), ATCO Office, 10035 – 105 St NW, Edmonton

Agenda Item	Time	Presenter
1. Welcome and finalization of Aug 27 meeting minutes	10:00	[AESO]
2. Comments on draft WG Terms of Reference and finalization of 502.11 T of R	10:00 – 10:30	[AESO] / All
<ul> <li>3. Discussions on what will be included in the substation rule 502.11</li> <li>Applicability</li> <li>Definition of transmission substation – major substation and "normal" substation</li> <li>General requirement</li> <li>Reliability and availability</li> <li>Safety</li> <li>Grounding</li> <li>Insulation</li> <li>Station service</li> <li>Control building</li> </ul>	10:30 – 12:00	All
4. Lunch break	12:00 – 1:00	All
5. Continue discussions on substation rule 502.11	1:00 - 2:45	All
6. Summarize and next meeting	2:45 – 3:00	[AESO]

Any question, please contact:



# SUBSTATION RULE 502.11 WORKGROUP TERMS OF REFERENCE (Draft)

(for comments) August 24, 2015

#### 1. Purpose

The AESO is responsible for the safe, reliable and economic planning and operation of the Alberta Interconnected Electric System ("AIES"), under the *Electric Utilities Act* and its regulations. The AESO develops and publishes binding ISO Rules, including Operating Policies and Procedures (collectively "ISO Rules"), pursuant to the Act and its regulations.

This Terms of Reference document is to notify stakeholders that the AESO intends to develop a New ISO Rule, Section 502.11 (and may also develop an associated Information Document), which will address the minimum technical requirements for future transmission substations to ensure the integrity and reliable operation of the AIES. To this end, the AESO is forming an industry workgroup to identify, prioritize and discuss the issues and possible solutions related to the minimum transmission substation technical requirements.

#### 2. Membership

The membership of the New ISO Rule 502.11 Workgroup ("WG") will be drawn from the Alberta electric industry. The AESO encourages participation from all Transmission Facility Owners (TFOs) and major industrial customers that have ownership and direct involvement in transmission substation design, construction and operation. Although the participation in the WG is open to the whole industry, the AESO reserves the right to limit the WG membership for the sake of efficiency. Membership in the WG will be limited to one individual per organization unless otherwise agreed to by the AESO. The WG will be chaired by the AESO representative.

The WG members must agree to the following:

- be willing to participate in all work of the WG, and to act in a professional and open manner;
- be willing to share experience and knowledge with other WG members;
- be willing to sign a confidentiality agreement protecting commercially sensitive data and information that may be shared among the WG members;
- have sufficient technical knowledge, or carry a primary technical responsibility within their organizations, related to transmission substation design, construction, commissioning and operation; and
- be willing to undertake investigations into specific technical issues as determined by the WG.

The membership of WG may be published on the AESO website.

#### 3. Scope

The scope of the workgroup discussions will be as follows:

- WG members will provide input and ideas that will form the basis of a future recommendation paper to be released by the AESO;
- The AESO is committed to carefully examining and analyzing all information and suggestions from the WG in the development of the recommendation paper;
- WG members may present ideas and recommendations to the WG for consideration and discussion in an open and responsive manner;
- The WG will focus primarily on the technical rules. However, WG members may be required to assist the AESO and other WG members in understanding and evaluating the financial implications of potential technical options;
- WG members will not be precluded from participating in the ISO Rule consultation process or in any related Alberta Utilities Commission ("AUC") proceeding in their own capacity, independent from the AESO.

#### 4. Principles

The AESO has developed a set of principles, set out in Appendix A, to ensure its consultation is inclusive, transparent, fair and efficient.

#### 5. Meetings

- The WG chair will be an AESO representative and will be at all meetings;
- The WG will meet monthly, or otherwise as determined by the AESO and the WG;
- The WG chair will make efforts to distribute the agenda and materials to the WG prior to any meetings.

## 6. Consultation Steps and Schedule

The table below presents a preliminary schedule for the proposed New ISO Rule 502.11.

ISO Rule Consultation Process Steps	Activity and Documents	Proposed Schedule
Step 1	The AESO invites participation in the WG by way of a Terms of Reference document	June 2015
Step 2	WG members provide written comments to the AESO on the proposed Terms of Reference and briefing materials (if any)	by July 15, 2015
Step 3	The AESO replies to stakeholder's written comments (if any)	by September 4, 2015
Step 4	The AESO holds technical meetings with WG members to identify, review and discuss the minimum technical requirements of New ISO Rule 502.11	September 2015 – January 2016
Step 5	The AESO drafts and circulates a recommendation paper to WG members setting out the minimum technical requirements proposed to be included in New ISO Rule 502.11	January 2016
Step 6	The WG members review the recommendation paper and provide written comments (if any) back to the AESO	February 2016
Step 7	The AESO reviews comments from WG members and	April 2016

	provides written responses. The AESO finalizes the technical requirements	
Step 8	The AESO starts drafting New ISO Rule 502.11 and circulates to WG members for final comments	May – July 2016
Step 9	The AESO finalizes proposed New ISO Rule 502.11, and issues a Letter of Notice for the New ISO Rule 502.11 to all industry stakeholders	September 2016
Step 10	Industry stakeholders provide written comments on the proposed New ISO Rule 502.11	October 2016
Step 11	The AESO replies to stakeholder comments and invites position letters from stakeholders	November 2016
Step 12	The AESO files final proposed New ISO Rule 502.11 with the AUC	December 2016

## Appendix A

## AESO CONSULTATION PRINCIPLES FOR ISO RULE DEVELOPMENT

The AESO principles for consultation on draft ISO rules are intended to provide guidance respecting the conduct of both the AESO and stakeholders. The AESO principles for consultation are as follows:

- 1. The ISO rules consultation process will be inclusive, transparent, fair and efficient and will be understood and accepted by all parties.
- 2. All parties will act in good faith and in a fair and respectful manner when engaged in the ISO rules consultation process.
- 3. The AESO has a statutory obligation to ensure the safe and reliable operation of the Alberta interconnected electric system ("AIES") and to promote a fair, efficient and openly competitive market for electricity. In the ISO rules consultation process, the interests of individuals must be considered in the context of the reliable operation of the AIES and in the public interest as a whole.
- 4. The ISO rules consultation process, particularly with respect to the degree of detail of information provided by the AESO and stakeholders, the time required for review of that information, and the amount of related discussion, will be commensurate with the importance, complexity, potential impacts, and urgency of the draft ISO rules changes.
- 5. The AESO will commence consultation early in the ISO rules consultation process to allow sufficient time for stakeholder participation and will provide stakeholders with complete, accurate, timely and comprehensible information. AESO information will be made available in a manner that stakeholders can readily understand and with adequate time for review and consideration.
- 6. The ISO rules consultation process will involve a full discussion of the views of the stakeholders in order to enable the AESO to make the best decision possible in the context of the AESO statutory mandate.
- 7. The AESO may develop a written Terms of Reference for each ISO rules consultation process, which may include description of relevant issues, establishment of working groups, one or more technical conferences, and a proposed schedule of key dates. The AESO will seek stakeholder input before finalizing the Terms of Reference.
- 8. Stakeholders will be given the opportunity to provide written comments in response to AESO documentation made available during the ISO rules consultation process.
- 9. Each stakeholder will raise all concerns or suggestions for improvement, and provide those concerns or suggestions for improvement in writing for discussion with others participating in the ISO rules consultation process and to share information necessary for others to understand and evaluate those concerns or suggestions.
- 10. All Terms of Reference, AESO information, comments from stakeholders with AESO replies, agendas and action items will be in writing and may be posted on the AESO website. Only those comments received from stakeholders in writing will be considered by the AESO when finalizing draft ISO rules.
- 11. When finalizing the draft ISO rules, the AESO will have regard for all written stakeholder input received during the ISO rules consultation process and will provide a written explanation where the draft ISO rules changes could not address a stakeholder concern or accommodate a stakeholder suggestion.
- 12. While written input from stakeholders during the ISO rules consultation process will inform the AESO's decision-making, the responsibility for the decision rests with the AESO, pursuant to its statutory mandate.