

May 3, 2022

To: Market Participants and Other Interested Parties (“Stakeholders”)

Re: **Consultation Letter – proposed new reliability standards and retirement of existing reliability standards:**

- 1) **Proposed new EOP-005-AB-3, *System Restoration from Blackstart Resources* (“new EOP-005-AB-3”);**
- 2) **Proposed new EOP-006-AB-3, *System Restoration Coordination* (“new EOP-005-AB-3”);**
- 3) **Proposed retirement of existing EOP-005-AB-2, *System Restoration from Blackstart Resources* (“existing EOP-005-AB-2”); and**
- 4) **Proposed retirement of existing EOP-006-AB-2, *System Restoration Coordination* (“existing EOP-006-AB-2”).**

Section 19 of the *Transmission Regulation* requires the Alberta Electric System Operator (“AESO”) to consult with Stakeholders likely to be directly affected by the AESO’s adoption or making of reliability standards, and also requires the AESO to forward the 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 is providing notice and seeking comments from Stakeholders on the attached proposed new reliability standards and retirement of existing reliability standards.

Development Approach

The draft proposed new EOP-005-AB-3 and proposed new EOP-006-AB-3 and related consultation follows the AESO’s current reliability standards development approach. The AESO is in the process of reviewing this approach as part of the [ARS Program Enhancements Stakeholder Engagement](#). Stakeholders are encouraged to participate in that engagement.

Applicability

The proposed new EOP-005-AB-3 is applicable to:

- (a) the ISO;
- (b) the operator of a transmission facility that the ISO includes in its restoration plan and in a list published on the AESO website that the ISO may amend from time to time in accordance with the process set out in Appendix 1 of EOP-005-AB-3;
- (c) the operator of a generating unit that:
 - (i) is not part of an aggregated generating facility;
 - (ii) has a maximum authorized real power rating greater than 18 MW; and
 - (iii) is directly connected to either the transmission system or to transmission facilities within the City of Medicine Hat; and
- (d) the operator of an electric distribution system that is identified in the restoration plan of an operator of a transmission facility.

The proposed new EOP-006-AB-3 is applicable to:

- (a) the ISO.

Background

The AESO is developing standards that relate to the adoption of North American Electric Reliability Corporation's ("NERC") EOP-005-3, *System Restoration from Blackstart Resources* and EOP-006-3, *System Restoration Coordination*. NERC indicated that the revisions were intended to: (1) streamline the EOP reliability standards; (2) remove redundancies and other unnecessary language while making the reliability standards more results-based;¹ and (3) address FERC's concern articulated in FERC Order No. 749 regarding system restoration training.^{2,3}

Purpose of Proposed new EOP-005-AB-3 & EOP-006-AB-3

The purpose of EOP-005 and EOP-006 remain the same.

The purpose of proposed new EOP-005-AB-3 is to ensure plans, facilities, and personnel are prepared to enable restoration of the interconnected electric system starting from blackstart resources, to ensure reliability is maintained during restoration, and priority is placed on restoring the interconnected electric system and the interconnection in accordance with the AESO's restoration plan.

The purpose of proposed new EOP-006-AB-3 is to ensure plans are established and personnel are prepared to enable effective coordination of the system restoration process to ensure reliability is maintained during restoration of the interconnected electric system in the event of a complete or partial blackout.

Summary of Proposed Changes

Proposed new EOP-005-AB-3 and proposed new EOP-006-AB-3 reflect the changes adopted by NERC in EOP-005-3 and EOP-006-3. In developing the proposed new EOP-005-AB-3 and proposed new EOP-006-AB-3, the AESO also determined that Alberta variances and administrative amendments⁴ were needed to allow proposed new EOP-005-AB-3 and proposed new EOP-006-AB-3 to be applied in Alberta without requiring a material change in the framework for the market for electric energy. These Alberta variances and administrative amendments are found in the posted documents *Comparison Rationale Matrix for proposed new EOP-005-AB-3* and *Comparison Rationale Matrix for proposed new EOP-006-AB-3*. A summary of these Alberta variances and administrative amendments are included below.

Proposed new EOP-005-AB-3

NERC changes:

- In NERC EOP-005-3 requirement R1 added the language to "develop and implement" the restoration plan when required to do so. With this revision, NERC concluded requirement R7 in EOP-005-2 to be redundant. Also with this revision, NERC concluded requirement R8 as duplicative with EOP-005-2, requirement R1, Part 1.3, to have a plan.

¹ NERC, 138 FERC ¶ 61,193, at P 81 (March 2012 Order), order on reh'g and clarification, 139 FERC ¶ 61,168 (2012). The March 2012 Order approved a NERC process to identify requirements that could be removed from Reliability Standards without impacting the reliability of the interconnected transmission network.

² System Restoration Reliability Standards, Order No. 749, 134 FERC ¶ 61,215, at PP 18, 24 (2011).

³ FERC Docket No. RM17-12-000; Order No. 840, Issued January 18, 2018.

⁴ Administrative amendments are referred to in the Rationale Matrix as a Reason for Difference.

- In NERC EOP-005-3 requirement R4, NERC removed the 90-day notification period, for a Transmission Operator⁵ to submit its revised restoration plan to its reliability coordinator, prior to a planned permanent bulk electric system (“BES”) modification. The AESO chose to adopt a revision to this change (see the *Alberta Variance* subsection below).
- In NERC EOP-005-3 requirement R5, NERC revised the requirement for the Transmission Operator from having the latest approved restoration plan within its primary and backup control rooms prior to the implementation date to having the plan in these control rooms prior to the plan’s effective date.
- NERC revised requirement R6 as a result of comments received from industry. The issue was raised that requirement R6, as written, could be misinterpreted to require that every step of the restoration process must be validated through steady state and dynamic simulation, which can be an overly burdensome task. This interpretation could result in numerous simulations having to be performed, which was outside of the intention of the drafting team. To eliminate any unintentional misinterpretation of Requirement R6, it was revised to: “Each Transmission Operator shall verify through analysis of actual events, a combination of steady state and dynamic simulations...”
- NERC added requirement R8.5 to transition demand and resource balance from the Transmission Operator to the Balancing Authority.

Proposed new EOP-005-AB-3 Alberta variances:

- The NERC EOP-005-3 “Applicability” section was redrafted to align with the Alberta reliability framework.
- Requirement R1 – In Alberta, the criteria for determining when system restoration is completed is different than what NERC identifies in requirement R1. In Alberta, the implementation of the restoration plan for an operator of a transmission facility ends when the AESO declares “system normal”. The criteria for determining system normal, has not been included in requirement R1 of EOP-005-AB-5, but instead is set out within the AESO’s restoration plan. The declaration of “system normal” also signals the resumption of the energy market in Alberta.
- Requirement R4b – The AESO chose to keep a notification period rather than adopting NERC’s change to remove the notification period. The AESO amended requirement R4(b) to require an operator of a transmission facility to submit its revised restoration plan from “not less than 90 days”, to “not less than 30” days prior to implementing a planned permanent interconnected electric system modification. A fixed timeline has been retained to ensure that review timelines align with those timelines established in requirement R5.1 in proposed new EOP-006-AB-3. Review timelines will, however, remain subject at all times to requirement R4.1 where the AESO does not approve a submitted restoration plan.
- Requirement R5.1 – Added to requirement R5.1 that the restoration plan of an operator of a transmission facility be provided to each appropriate operator of an electric distribution system prior to the effective date of the plan. This was done in order to ensure the operator of an electric distribution system, identified in the system restoration plan of its interconnecting operator of a transmission facility, has the latest AESO-approved restoration plan at all times.
- Requirement R6 – Amended to align with other requirements within proposed new EOP-005-AB-3 where an activity must take place once every set number of years. For greater clarity as to the computation of time with respect to this provision, the stated number of years within the five-year cycle have been updated to calendar years.

⁵ Reliability Coordinator, Transmission Operator, and Balancing Authority are NERC functional entities and are defined in NERC’s Glossary of Term. Available at www.nerc.com.

Administrative amendments:

- The term “operating personnel” has been updated in requirement R8 to align with PER-005-AB-2 Operations Personnel Training, to state, “real time operating personnel”. The update does not alter the intent of the provision.
- 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 the proposed new reliability standard.

Proposed new EOP-006-AB-3

NERC changes:

- In NERC EOP-006-3 requirement R1, NERC added the language to “develop and implement” the restoration plan. With this revision, NERC retired requirements R7 and R8 in EOP-005-2, the rationale for the retirement of requirements R7 and R8 are provided below.
- In NERC EOP-006-3 requirement R1, NERC retired parts 1.2, 1.3 and 1.4 as they were determined to be redundant with requirement R1, part 1.5.
- In NERC EOP-006-3 requirement R4, NERC added that each Reliability Coordinator is to review each of its neighbouring Reliability Coordinator’s restoration plans and provide written notification of any conflicts identified during the review within 60 days of receipt. Clarity was also added to this requirement that the 30-day time period for resolving conflicts starts upon receipt of written notification.
- In NERC EOP-006-3 requirement R5.1, NERC added that a notification of approval or disapproval of a Transmission Operator’s restoration plan is to be provided to the Transmission Operator.
- In NERC EOP-006-3 requirement R6, NERC revised the requirement for Reliability Coordinators to have copies of the latest approved restoration plans of Transmission Operators within its area within its primary and backup control rooms prior to each plan’s effective date, rather than prior to the implementation date. The AESO chose to adopt a revision to this change (see the Alberta Variance subsection below).
- NERC removed requirements R7 and R8 in EOP-006-2 resulting in the removal of prescriptive wording pertaining to the implementation of the Reliability Coordinator’s system restoration plan. NERC views this requirement as “a logical action that does not require a standard.” In addition, by adding the language: “develop and implement” to EOP-006-3, requirement R1, EOP-006-2, requirements R7 and R8, are redundant to EOP-006-3, requirement R1.

Alberta variances:

- The NERC EOP-006-3 "Applicability" section was redrafted to align with the Alberta reliability framework.
- Requirement R1 has been updated to require that the AESO’s restoration plan is implemented in accordance with the content of its restoration plan. This update did not identify the portion of NERC requirement R1 that states when the scope of the system restoration plan ends as the AESO’s system restoration plan details a series of conditions that must be met, depending on the nature of the outage, to bring an end to the implementation of the AESO’s restoration plan. The end of the implementation of the AESO’s system restoration plan may or may not be at such time, as identified by NERC, when the transmission facilities of each operator of a transmission facility are interconnected or the AESO’s area is connected to all of its neighbouring reliability coordinator areas.

- Amended requirement R1 to refer to the interconnected electric system rather than the bulk electric system as this better describes the system being considered for restoration. Further, this update aligns with proposed new EOP-005-AB-3, requirement R1.
- In Alberta, the AESO is responsible for the safe and reliable operation of the interconnected electric system and, as such, prepares a detailed restoration plan for the interconnected electric system. Requirement R6 was previously modified to require that the AESO have, within its control centres, a copy of the restoration plans or procedures for each operator of a transmission facility that is required to have an approved plan or procedure in accordance with EOP-005. This provision, however, has been updated to remove this requirement as the effective restoration of the interconnected electric system does not depend on the AESO having copies of other operator restoration plans in its control centres.

Administrative amendments:

- Requirement R4 has been updated to both align with the updates made by NERC in EOP-006-3 and to provide for greater clarity for the Alberta context. The use of the verb ‘identify’, rather than that of ‘discover’ or ‘find’, has been selected for drafting consistency with other Alberta Reliability Standards.
- Provided clarity in requirement R5.1 that notification of approval or disapproval of an operator of a transmission facility’s restoration plan will be a written notification.
- Provided clarity in requirement R5.1 that it is the receipt of the restoration plan by the AESO that initiates the computation of time for the AESO’s review period of a restoration plan.
- The term “operating personnel” has been updated in requirements R6 and R7 to align with PER-005-AB-2 Operations Personnel Training, to state, “real time operating personnel”. The update does not alter the intent of the provision.
- 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 the proposed new reliability standards.

Defined Terms

When reviewing the attached proposed new reliability standards and retirement of existing reliability standards, Stakeholders should note that all defined terms appear **bolded**. Stakeholders are encouraged to refer to the AESO’s CADG when reviewing proposed 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 Stakeholders 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.

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.

Implementation Timeline Decision

NERC EOP-005-3 and EOP-006-3 have been in effect since April 1, 2019. NERC gave its functional entities 4 full calendar quarters to implement EOP-005-3 and EOP-006-3.

The AESO is of the view that the proposed new EOP-005-AB-3 and proposed new EOP-006-AB-3 do not require a significant effort to implement. As a result, it is proposing to set the effective date as 1 full calendar quarter after Commission approval, which the AESO estimates to be April 1, 2023. However, if the majority of Stakeholders prefer that the AESO aligns with the NERC implementation timeline of 4 full calendar quarters after approval, which the AESO estimates to be April 1, 2024, the AESO is prepared to move forward with that recommendation. The AESO requests that Stakeholders provide their preference in the *Stakeholder Comment Matrix*.

Request for Comment

Please use the attached *Stakeholder Comment Matrix* when submitting comments to the AESO. The AESO only considers written comments in finalizing the proposed new reliability standards and retirement of existing reliability standards. Stakeholders should ensure that comments provided represent all interests within their organization. Please respond to the questions in the attached *Stakeholder Comment Matrix* and provide your specific comments, proposed revisions, and reasons for your position. Providing general comments does not give the AESO any specific issue to consider and address, and results in a general response. The scope of comments is limited to the proposed new reliability standards and retirement of existing reliability standards.

Stakeholders are asked to provide comments no later than **May 25, 2022** to ars_comments@aeso.ca. Adherence to deadlines is essential to the integrity of the comment process, and as such, the AESO may choose not to consider any Stakeholder comments received after the deadline.

The AESO will be publishing all comments received for industry review by May 31, 2022. The AESO expects to publish replies to the comments with the final proposed new reliability standards and retirement of existing reliability standards in August 2022. The AESO expects to forward the proposed new reliability standards and retirement of existing reliability standards to the Commission in September 2022, along with its recommendation that the Commission approve the proposed new reliability standards and retirement of existing reliability standards, to become effective 1 full calendar quarter after Commission approval.

If the AESO does not receive comments regarding proposed new reliability standards and retirement of existing reliability standards, the AESO expects to forward the proposed new reliability standards and retirement of existing reliability standards to the Commission in June 2022, along with its recommendation that the Commission approve the proposed new reliability standards and retirement of existing reliability standards, to become effective 1 full calendar quarter after Commission approval.

Related Materials to Consultation Letter

The following documents are posted on the stakeholder engagement page:

1. *Stakeholder Comment Matrix* for proposed new reliability standards and retirement of existing reliability standards;
2. Copy of proposed new EOP-005-AB-3;
3. Copy of proposed new EOP-006-AB-3;
4. Copy of existing EOP-005-AB-2;
5. Copy of existing EOP-006-AB-2;

6. Comparison Rationale Matrix for proposed new EOP-005-AB-3; and
7. Comparison Rationale Matrix for proposed new EOP-006-AB-3.

Sincerely,

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