

Introduction

On Nov. 23, 2021, the AESO provided notice and sought written feedback from interested stakeholders on their perspectives as it related to the current Alberta reliability standards (ARS) Program, and on identifying and prioritizing areas of potential improvement opportunities. The comment period ran from Nov. 23, 2021, to Jan. 21, 2022, to accommodate the holiday season and to afford stakeholders an opportunity to prepare a comprehensive submission.

Participating stakeholders

We value stakeholder feedback, and we thank you for sharing your insightful perspectives and instructive comments with us. We reviewed the submissions in detail and developed a summary of the comments below.

The following 12 stakeholder organizations provided submissions:

1. AltaLink Management Ltd.
2. ATCO Electric Transmission
3. Capital Power Corporation
4. Cenovus Energy Inc.
5. CNRL – Canadian Natural Resources Ltd.
6. ENMAX Energy and ENMAX Power
7. EPCOR Distribution & Transmission Inc.
8. Heartland Generation Ltd.
9. Imperial Oil
10. Suncor Energy Inc.
11. TC Energy Ltd.
12. TransAlta Corporation

View [stakeholder comments](#) here or visit the AESO website at www.aeso.ca and follow the path: Rules, Standards and Tariff > Alberta Reliability Standards > ARS Development & Monitoring.

AESO's ARS Program

The AESO's ARS Program establishes at a high level how the AESO sets up the processes and structure for carrying out its mandate to establish and monitor reliability standards in Alberta. Alberta reliability standards are the requirements followed by the AESO and Alberta market participants to provide for the reliable and secure operation of the AIES. Today, the AESO's ARS Program incorporates risk-based factors into the development and monitoring approaches in the prioritization of standards to be adopted, to the selection of requirements to be audited, and to the development of core audit standards.

The ARS standards development approach sets out the structure, criteria, and processes for adopting NERC reliability standards into Alberta. The AESO consults with stakeholders on any adoption, rejection or modifications to standards. The ARS Program Work Plan is intended to provide stakeholders with a prioritization and schedule of standards development to support resource planning to develop, implement, and maintain compliance to new reliability standards.

The ARS standards implementation approach requires AESO and the market participants to prepare the transmission system and processes to comply with new requirements, such as implementing technical requirements (e.g., modifying equipment) and/or implementing required processes and associated controls (e.g., training programs, monitoring, policies, procedures, reporting) to ensure requirements supporting reliability are in place and effective.

The ARS compliance monitoring program (CMP) sets out the structure, criteria, tools, and processes for monitoring compliance to ensure and improve the reliability of the transmission system. Main tools in the program include annual self-certifications and scheduled audits on a three-year cycle.

The Alberta Reliability Committee Discussion Group (ARC-DG), technical working groups, lessons learned stakeholder sessions were established to provide a forum for discussion, consultation, and collaboration to develop, implement, and maintain compliance to ARS.

Summary

Stakeholders feel overburdened by the existing ARS Program, which they feel requires dedication of significant resources, incurs substantial costs, and expends great effort to participate in the development and implementation of reliability standards, and demonstrating compliance to those standards. Stakeholders desire a more efficient approach that strikes the right balance between compliance and maintaining reliability. While market participant participation in the ARS program is essential for the AESO and industry to maintain the safe, reliable, secure, and economic operation of the AIES, we recognize there are opportunities to reduce the administrative and regulatory burden and improve efficiency in achieving this goal.

The following categories of themes resonated from the stakeholder comments and will be considered in our objectives to improve efficiency and lessen administrative and regulatory burden through this initiative.

Embed a more comprehensive risk-based approach – reliability, risk and prioritization

- Stakeholders strongly support a risk-based approach to the development and monitoring of reliability standards, with suggestions that consider a number of risk elements, with reliability being the primary factor. Many stakeholders support the NERC-based model for both development and monitoring of standards as they feel it is more efficient, offering advantages of tailoring audit programs to individual stakeholders based on risk elements, including inherent risk profiles, compliance history, internal compliance program ratings, and facility risk to reliability. Stakeholders suggest such tailoring could result in reduced frequency of scheduled audits, more focused and reduced audit scopes, and other flexible program elements.
- Some stakeholders describe the one-size-fits-all ARS Program increases the regulatory burden for smaller facilities that do not significantly impact overall reliability by having the same standards and requirements applicable to them. Suggestions that this regulatory burden could be reduced by implementing a more risk-based approach, as a risk-based approach varies the degree of testing depending upon the risk to reliability.
- Stakeholders suggest embedding a more structured and comprehensive consideration of risk factors to provide a more reliable and consistent basis for decisions related to development and monitoring programs. Stakeholders suggest risk-based assessments could be used to determine whether a standard is applicable to a market participant, support reductions in audit scope, and determine the number of audits needed.
- Stakeholders recommend the risk-based approach may lead to more efficient compliance programs that incorporate increased flexibility such as having variable audit cycles (variable cycles of up to six years replacing current three-year fixed cycles) and audit scopes based on standards with higher reliability risk and resiliency (in place of a set of core standards and requirements).

Leverage and increase alignment to NERC – approach, definitions, standards

- Stakeholders suggest the standards development process needs to better align with and synchronize to the timing of NERC's versions of effective reliability standards, in particular with the Critical

Infrastructure Protection (CIP) standards. Stakeholders recommend the criteria and rationale for prioritization of standards development, and an analysis of the benefits and risks to the reliability of the AIES should be part of the approach.

- Stakeholders note that the standards development process is overly complex and inefficient, lacks transparency, and does not allow sufficient time for appropriate consultation. Stakeholders are seeking rationale or explanations on the AESO's approach to adopting and retiring standards, suggesting having a business case analysis and reasons for deviating from NERC standards, definitions, and terminology. The deviations create additional burdens and costs for stakeholders operating in both NERC and Alberta as they are required to maintain compliance programs for different sets of standards. Many stakeholders questioned the benefits to grid reliability of the AESO's approach.
- Stakeholders see that the current approach of adopting NERC reliability standards at a different pace than NERC creates unnecessary burden, inefficiency, and complexity with little benefit. The lack of synchronization between Alberta and NERC versions creates confusion in the use of NERC guidance material, redundant expenditure of resources to create and maintain an Alberta set of reliability standards, and increased reliability and security risk due to being multiple versions behind of NERC versions. In particular, stakeholders see the need for AESO to focus on bringing the CIP standards to the NERC versions to take advantage of security improvements and administrative efficiencies in the newest versions.
- Some stakeholders indicate the bulk electric system (BES) definition in effect in Alberta increases the regulatory burden for smaller facilities rather than if there was alignment with the NERC definition. Stakeholders have suggested that the compliance program should incorporate risk-based factors to focus on requirements with higher reliability risk.

Enhance supporting information and guidance materials

- Stakeholders indicate that while there is information available in the standard, information documents, assessment worksheets, NERC guidance, etc., market participants perceive that the information is not sufficiently clear or always timely resulting in implementations that may not meet requirements, interpretations that lead to contraventions, and collection of evidence that does not meet compliance expectations.
- Stakeholders note confusion and lack of clarity around guidance materials and expectations for compliance as key areas for improvement. They shared examples such as (i) not clear whether they can use the NERC guidance as unsure if the NERC guidance, based on new versions, is applicable to the Alberta version; (ii) audits do not seem to be based on pre-established interpretation of standards; and (iii) market participants and auditors are not on the same page regarding compliance expectations. Some stakeholders specified the confusion and lack of clarity of standards and expectations is especially pronounced for the CIP standards.
- Stakeholders suggest the need for improved comprehensive guidance information (clear, pre-established and timely) to support a common understanding of the requirements and expectations, and reduce interpretations which lead to inefficient implementation, contraventions, and administrative burden. Specific improvement suggestions include (i) more specific and clear measures in the Authoritative Documents (ADs), (ii) include examples and formats in evidence expectations and reliability standard audit worksheets (RSAWs), (iii) provide clarity on which versions of NERC guidance applies, and (iv) look at adopting NERC White Papers and learnings into ARS process and restructuring support information to align with technical documents and templates used in the Mid-West Reliability Organization (MRO).

- Stakeholders request compliance expectations and guidance materials to be included in the scope of consultation discussions for new standards being planned for adoption.

Increase opportunities for stakeholder engagement and discussion

- Stakeholders would welcome the resumption of the Alberta Reliability Committee Discussion Group (ARC-DG) and technical working groups in the development of standards with representation from AESO's development team, compliance team, and the Market Surveillance Administrator (MSA). Stakeholders believe these forums provide two-way dialogue and support enhanced opportunities for stakeholders to discuss and ask questions in the development phase of standards, acquire better understanding of technical requirements and compliance expectations, intent of information request (IRs), lessons learned, and improve coordination in compliance and enforcement.
- Stakeholders recommend increasing opportunities for broad industry engagement with AESO development and compliance monitoring groups, MSA, and stakeholders to enhance two-way discussions as they stated it is necessary during ARS development activities to achieve clarity and understanding of requirements and expectations, leading to less industry burden.

Improve the ARS Program Work Plan

- Several stakeholders commented that the ARS work plan does not provide sufficient outlook for multi-year budgetary planning including input to the General Tariff Application cycle. In addition, several stakeholders commented that the schedule and timing of the development and implementation of standards is inconsistent, changes without warning and lacks transparency, which also makes it difficult to budget and forecast resource needs. Stakeholders would like to see a transparent rationale for the development prioritization in the standards development workplan.
- Stakeholders recommend the ARS program workplan should provide firm target dates and establish prioritization criteria for ARS adoption that supports stakeholders and creates certainty for them to allow for more effective preparation and planning to resource and budget accordingly.

Enhance compliance monitoring program and processes

- Stakeholders support changes to the compliance monitoring approach to incorporate risk-based factors into the program to focus on requirements with higher reliability risk.
- Stakeholders recommend improvements to the compliance program that facilitate efficiency and suggest more preparation time, flexibility in the information request process, faster response times for audits to be completed, and incorporation of more efficient tools to address administrative contraventions (e.g. NERC's Compliance Exception (CE) and Find, Fix, Track (FFT) tools).
- A recommendation that requirements that do not translate to greater reliability benefits should be removed from audit scope as stakeholders feel that conducting work that does not translate into significantly increased reliability of the AIES is an unnecessary administrative burden of the ARS Program. Stakeholders saw an opportunity to gain greater value and efficiency by removal of these requirements from the audit scope thus allowing the AESO and market participants to focus on the most impactful reliability requirements more narrowly.
- Stakeholders see value in the AESO providing specific recommendations in audit findings to help in the development of the mitigation plans. Additionally, stakeholders see a role for the AESO in assessing the adequacy of mitigation plans. Today, reviewing and accepting mitigation plans is a process overseen by the MSA and subsequently checked in audits conducted by the AESO.

Next steps

Quick wins

Through the review of the comments, a few items emerged that can be implemented quickly to gain immediate benefits in improving efficiency of the compliance monitoring program (CMP). The AESO CMP team is currently reviewing the audit program for 2022 to identify audit scope reductions, and to defer audits of market participants that the AESO can confidently determine do not have a significant impact to the reliability of the AIES. Opportunities to streamline reporting and extend notifications and timelines within the audit processes are being considered to alleviate strain for market participants in preparing for audits.

In addition, we will be re-establishing an ARC-DG type of meeting to support enhanced two-way dialogue and increase the opportunities for stakeholders to discuss and ask questions in the development phase of standards.

During this initiative, if there are suggestions we can introduce in real-time we will endeavor to do so. Please note these types of suggestions, such as piloting new approaches, would be introduced in a trial period to evaluate success.

Draft roadmap and kick-off session

Stakeholder comments and recommendations, and the themes summarized here will be further assessed and considered to guide the development of a roadmap for this initiative, which will be shared by the end of March.

The draft roadmap, including a proposed pace and prioritization of initiatives, will be brought to stakeholders for input and discussion at a session in mid-April. Once finalized, the roadmap will serve as our plan and schedule for implementing enhancements to the ARS Program with a focus on driving efficiencies that will result in a reduction in regulatory burden for market participants, while maintaining the safe, reliable, secure, and economic operation of the Alberta Interconnected Electric System (AIES).

Your continued participation, lending of your expertise and commitment to engaged dialogue will be integral to the success of this industry-wide initiative. We thank you in advance for your time and attention to this important initiative.