

Development of Proposed New and Amended Communications ISO Rules and Reliability Standards May 10, 2022

Notice

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In accordance with its mandate to operate in the public interest, the AESO will be audio recording this Stakeholder session and making meeting minutes of the session available to the general public at <u>www.aeso.ca</u>. The accessibility of the session is important to ensure openness and transparency and to facilitate the participation of Stakeholders. Participation in this session is completely voluntary and subject to the terms of this notice.

The collection of personal information by the AESO for this session will be used for the purpose of capturing Stakeholder input for the development of the proposed new and amended ISO rules and standards. This information is collected in accordance with Section 33(c) of the *Freedom of Information and Protection of Privacy Act*. If you have any questions or concerns regarding how your information will be handled, please contact the Director, Information and Governance Services at 2500, 330 – 5th Avenue S.W., Calgary, Alberta, T2P 0L4, by telephone at 403-539-2528, or by email at privacy@aeso.ca.

- The participation of everyone is critical to the engagement process. To ensure everyone has the opportunity to participate, we ask you to:
 - Listen to understand others' perspectives
 - Disagree respectfully
 - Balance airtime fairly
 - Keep an open mind

- Meeting minutes will be prepared by AESO employees with the help of a minute-taking software program.
- Organization names will be used to identify contributions.
- Draft meeting minutes will be circulated to attendees for review and ultimately posted to the AESO website.

Using Zoom

- All attendees will join the webinar in listen-only mode and the host will have attendee cameras disabled and microphones muted.
- When asking or typing in a question, please state your first and last name and the organization you work for to ensure your comments are attributed to your company.
- Two ways to ask questions during the Q&A portion if you are accessing the webinar using your computer or smartphone.
 - Raise your "hand": The host will be notified that you have raised your hand and will open up your microphone when there is an opportunity to do so. Wait until the host opens up your microphone.
 - Type your question into the Q&A window: You are also able to up-vote questions that have been already asked. The host will see your questions and the up-votes and will have your question answered when there is an opportunity to do so.

Using Zoom – where to access controls

- Using a 2-in-1/PC/MAC Computer
 - Hover your cursor over the bottom area of the Zoom app and the Controls will appear.
 - Click "Raise Hand".
 - When the host opens your mic, your name will appear on the screen but your camera will remain turned off.
 - Click "Lower Hand" to lower it if needed.
 - Click the "Q&A" button and typing them in.
- Using Smartphone.
 - Tap "Raise Hand".
 - When the host opens your mic, your name will appear on the screen but your camera will remain turned off.
 - Tap "Lower Hand" to lower it if needed.
 - You can also ask questions by tapping the "Q&A" button and typing them in.

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- Press *9 on your keypad to Raise your hand.
- When the host opens your mic, your phone number will appear on the screen, but your camera will remain turned off.
- Unmute your microphone by pressing *6 and then you can ask your question.
- Phone controls for attendees
 - Press *9 Click phone's dial pad. The host will be notified that you've raised your hand.
 - To toggle between mute and unmute, on your phone's dial pad, press *6.

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AESO Stakeholder Engagement Framework



OUR ENGAGEMENT PRINCIPLES

Inclusive and Accessible Strategic and Coordinated Transparent and Timely Customized and Meaningful



Introduction and Session Purpose

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Grid Reliability - Operations

- Jason Bucholtz, Real Time Manager, Reliability
- Kathryn Kuber, Reliability Standards Technical Specialist
- Ken Gardner, Reliability Standards Technical Advisor

Grid Reliability – Projects and Planning

Stephen VanderZande, Engineering Specialist Telecom & SCADA

Legal and Regulatory Affairs

- Brij Modha, Regulatory Analyst
- Ijeoma Ofodile, Legal Counsel
- Michelle Jackson, Regulatory Administrator
- Valerie Anasco, Legal & Regulatory Coordinator

Registration (as of May 3, 2022)

- Alberta Newsprint Company
- Alberta-Pacific Forest Industries Inc.
- AltaLink Management Ltd.
- ATCO Electric Ltd.
- Best Consulting Solutions Inc.
- Cancarb Limited
- City of Lethbridge
- City of Medicine Hat
- CNOOC
- CognitiveTech Inc.
- Constellation
- Dow Chemical Canada
- ENMAX
- EPCOR
- GridSME
- Lionstooth Energy Inc.
- Market Surveillance Administrator
- Mercer Peace River Pulp
- NorthPoint Energy
- Suncor Energy Inc.

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- Receive Stakeholder feedback on the AESO's proposed approach to voice communication system requirements.
- Receive Stakeholder feedback on draft proposed authoritative documents and information documents content, including:
 - draft amended Section 502.4 of the ISO rules, Automated Dispatch and Messaging System ("ADaMS") ("Section 502.4") and related information document #2017-006R;
 - draft proposed reliability standard COM-001-AB-3, *Communications* ("COM-001-AB-3"), and related amended information document #2012-010RS; and
 - draft proposed reliability standard COM-002-AB-4, Operating Personnel Communication Protocol ("COM-002-AB-4");

collectively referred to as the "Communication ISO Rules and Reliability Standards").

 Update Stakeholders on the AESO Voice Communications and Grid-Operations Wide-Area Network Development system project ("Go-WAN Project").

Agenda

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Time	Agenda Item		
9:00 – 9:10	Webinar Information		
9:10 – 9:20	Introductions and Session Purpose		
9:20 - 9:30	Background		
9:30 - 10:00	Proposed New COM-001-AB-3		
10:00 – 10:15	Coffee Break		
10:15 – 10:30	Proposed New COM-002-AB-4		
10:30 - 11:00	Proposed Amended Section 502.4		
11:00 – 11:15	Update on Go-WAN Project		
11:15 – 11:30	Next Steps		



Background



ISO Rule and Reliability Standards Development Process

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ISO Rules Development

- Section 20 of the *Electric Utilities Act* grants authority to the AESO to develop ISO rules.
- AUC Rule 017, *Procedures and Process for Development of ISO Rules and Filing of ISO Rules with the Alberta Utilities Commission*, sets out the requirements for the development of ISO rules, including:
 - Stakeholder engagement requirements; and
 - AUC application requirements.

Reliability Standards Development

- Sections 19 and 21 of the *Transmission Regulation* sets out the provisions for the AESO to:
 - Develop, adopt, or modify reliability standards for application in Alberta;
 - Consult impacted market participants; and
 - Forward to the AUC for approval.

AESO's Proposed Amendments to Communications Requirements

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Purpose

- Align with NERC COM-001-3 and COM-002-4 requirements
- Reduce known risks related to the existing backup voice system requirements
- Eliminate overlap
- Improve clarity and organization of the requirements

Comparison of Existing and Proposed Approach

Existing/ Proposed	Voice Communication System Requirements	Operating Personnel Communication Protocol Requirements	ADaMS Requirements
Existing	COM-001-AB-1.1 COM-002-AB1-2a Section 502.4	COM-002-AB1-2a	Section 502.4
Proposed	COM-001-AB-3	COM-002-AB-4	Section 502.4



Proposed New COM-001-AB-3

COM-001-AB-3 Summary of Proposed Approach

- Consolidated all voice communication system requirements into the proposed new COM-001-AB-3; and
- Discontinued the proposed development of Section 502.17 of the ISO rules, Voice Communication System Requirements.
- Created 2 types of requirements:
 - Modified NERC COM-001-3 requirements; and
 - Additional AB-specific requirements that are uniquely identified (e.g., requirement R3.A1).
- Replaced "interpersonal communication" with "voice communication" in modified NERC COM-001-3 requirements.



COM-001-AB-3 Rationale on Proposed Approach

- Consolidating voice communication system requirements into 1 document will be easier for Stakeholders to reference.
- Having Alberta-specific requirements in the ARS is similar to WECC regional variances in NERC standards.
- Modifying some NERC COM-001-3 requirements by replacing "interpersonal communication" with "voice communication" addresses Stakeholder concerns regarding how the 2 sets of requirements relate.

Links to COM-001-AB-3 Related Material (posted March 29, 2022) Draft COM-001-AB-3 Comparison Matrix Draft COM-001-AB-3 Clean Copy



Poll Question

ID Content

- Control room description and categorization for each operator of a transmission facility, electric distribution system, generating unit, and an aggregated generating facility.
- Primary voice communication capability options and criteria.
- Backup voice communication testing schedule, successful test criteria, acceptable satellite telephone systems, and details regarding utility orderwire system.
- Modified NERC guidance material on internal communication capability.
- Clarity on expectations for each operator of a distributed energy resources.

Links to ID #2012-011RS (posted March 29, 2022) Draft AESO information document #2012-001RS







Proposed New COM-002-AB-4

COM-002-AB-4 Summary of Proposed Approach and Rationale

Approach:

 Aligned requirements closely with NERC COM-002-4, while modifying content to consider differences between NERC and AESO terminology, functional entity types, and mandate.

Rationale:

 Improve clarity on expectations related to operating personnel communication protocol requirements.

Links to COM-002-AB-4 Related Material (posted March 29, 2022) Draft COM-002 Clean Copy Draft COM-002 Comparison Matrix









Poll Question



Proposed Amended Section 502.4

Section 502.4 Summary of Proposed Approach

- Included ADaMS requirements only.
- Updated Applicability section to include all pool participants receiving dispatches or directives that the AESO issues through ADaMS.
 - This makes the rule applicable to outliers that receive verbal dispatches.
- Replaced existing operating requirements, that ADaMS be continuously operated and adhere to specific performance measures, with requirements that the <u>pool participant</u> be available 24 hours a day to receive:
 - Dispatches and directives through ADaMS; and
 - Phone calls through a phone number provided to the AESO.



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Section 502.4 Rationale on Proposed Approach

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Rationale

- Making ADaMS applicable to all relevant pool participants results in an optimized use of existing technology. Verbal dispatches are resource intensive and unnecessary given the functionality of ADaMS.
- Revising existing ADaMS operating requirements to better reflect the AESO's intent that each pool participant must be available to allow the AESO to efficiently and reliably operate the market.

Links to Section 502.4 Related Material (posted March 29, 2022) Draft Section 502.4 Clean Copy

Draft AESO information document #2017-006R



Poll Question



Go-WAN Project



Overview

- AESO system project was initiated to improve backup voice and SCADA communications with operators of critical transmission and generating unit control rooms (control rooms that can operator >=300 MW).
- Initiated in part to:
 - more effectively and efficiently address existing operational risks; and
 - address Stakeholder concerns regarding the application of utility orderwire system requirements on existing facilities.
- Combined installation of utility orderwire voice and SCADA network redundancy project to improve efficiency.
- Coordinated between 16 market participants to ensure alignment.

Timeline

- Initiated project in early 2021.
- Target completion by end of 2022.



Next Steps



Next Steps

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AESO initiates stakeholder engagement



The AESO engages with stakeholders on the development of the proposed ISO rules/ARS. This includes activities such as: stakeholder sessions, written feedback, draft requirement language, and conducting analysis.

The AESO drafts and posts the proposed final ISO rules/ARS on the AESO website and solicits stakeholder comments

Stakeholders provide written comments The AESO posts stakeholder comments and AESO replies

The AESO may amend the proposed ISO rules/ARS considering stakeholder comments



The AESO files an application with the AUC requesting approval of the final proposed ISO rules/ARS



Contact the AESO





- Twitter: @theAESO
- Email: rules_comments@aeso.ca
- Website: www.aeso.ca
- Subscribe to our stakeholder newsletter



Thank you





Survey