

# 2022 Budget Review Process Initial Proposed Business Initiatives Session 1

August 26, 2021

## **Notice**



In accordance with its mandate to operate in the public interest, the AESO will be audio recording this session and making the session recording available to the general public at <a href="https://www.aeso.ca">www.aeso.ca</a>. The accessibility of these discussions is important to ensure the openness and transparency of this AESO process, 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 2022 Budget Review Process engagement. 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 <a href="mailto:privacy@aeso.ca">privacy@aeso.ca</a>.





## Welcome and introductions



- Mike Law, President and CEO
- Nicole Kinch, VP, Finance
- Dennis Frehlich, VP, Grid Reliability
- Miranda Keating Erickson, VP, Markets
- Pauline McLean, VP, Law, General Counsel and Corporate Secretary
- Karen Campbell, Director, Settlement, Credit and Business Planning
- Karla Anderson, Senior Stakeholder Relations Advisor

# Session purposes and objectives



## Purpose

 The purpose of the session is to engage stakeholders in a discussion of the 2022 Budget Review Process (BRP), updates on the 2021 business initiatives, and the initial proposed 2022 business initiatives

# Session objectives

- Present the 2022 BRP process overview and engagement schedule
- Share our learnings on 2021 BRP stakeholder feedback
- Present, discuss and seek stakeholder input on status updates and planned next steps on 2021 business initiatives
- Present, discuss and seek stakeholder input on the initial proposed 2022 business initiatives as identified by the AESO

# **Agenda**



- Welcome and introductions
- Strategic focus
- 2022 Budget Review Process (BRP)
  - Process overview and engagement schedule
  - Key learnings from 2021 BRP
- Overview of business initiatives
- 2021 Multi-year business initiatives status and next steps
  - Status update and planned next steps for 2021
  - Proposed milestones for business initiatives continuing into 2022
- Initial proposed 2022 business initiatives
- Stakeholder discussion and input
- Session close-out and next steps

# **AESO Stakeholder Engagement Framework**





# Stakeholder participation



The participation of everyone here 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

# **Asking questions**



- Two ways to ask questions if you are accessing the webinar using your computer or smartphone
  - Click "Raise Hand" icon and the host will be notified that you would like to ask a question. The host will unmute your microphone, you in turn will need to unmute your microphone and then you can ask your question.
    - When asking a question, please state the "organization you work for and your first and last name"
  - You can also ask questions by using the chat function and typing them in. Please add "question and the organization you work for" at the start of your chat, for example: "Question ABC company: what does BRP stand for?"

# Registrants (as of August 19, 2021)



- Alberta Direct Connect Consumers Association (ADC)
- AltaLink
- ATCO Electric
- Best Consulting Solutions Inc.
- BR Power
- Brookfield Renewable
- Capital Power
- ENMAX
- Heartland Generation

- Independent Power Producers Society of Alberta (IPPSA)
- Industrial Power Consumers
   Association of Alberta (IPCAA)
- Lionstooth Energy Inc.
- Suncor Energy
- TransAlta Corporation
- Utilities Consumer Advocate (UCA)





# **Strategic Plan alignment**





# **Strategic focus**



- Current economic conditions in the province continue to lead the AESO to focus priorities on:
  - Cost management across the industry value chain
  - Facilitating business in Alberta
  - Ensuring a simple and agile approach to our operations
- These measures continue to align with what we have heard from discussions with the CEO Industry and Associations and Agencies Roundtables and stakeholder engagement sessions





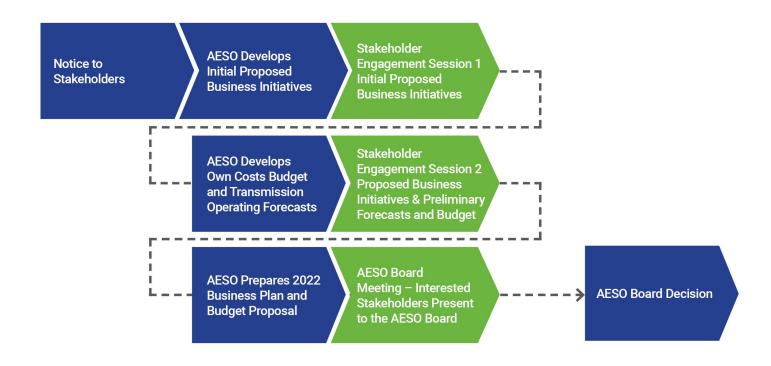
# 2022 BRP approach



- The AESO will engage with stakeholders who have an interest in participating in the 2022 BRP, which will be used to establish the AESO's business plan and budget for 2022
- The purpose of the BRP is to:
  - Provide the AESO's coming year's transmission operating forecasts;
  - Consult on the AESO's business initiatives and own costs budget proposed for the coming year;
  - Provide transparency and meaningfully engage with stakeholders; and
  - Ensure the AESO Board is succinctly informed of the following to assist them in formalizing their Board Decision:
    - The consideration and assessment of stakeholder feedback received throughout the process
    - The AESO's proposed budget and forecasts for the coming year

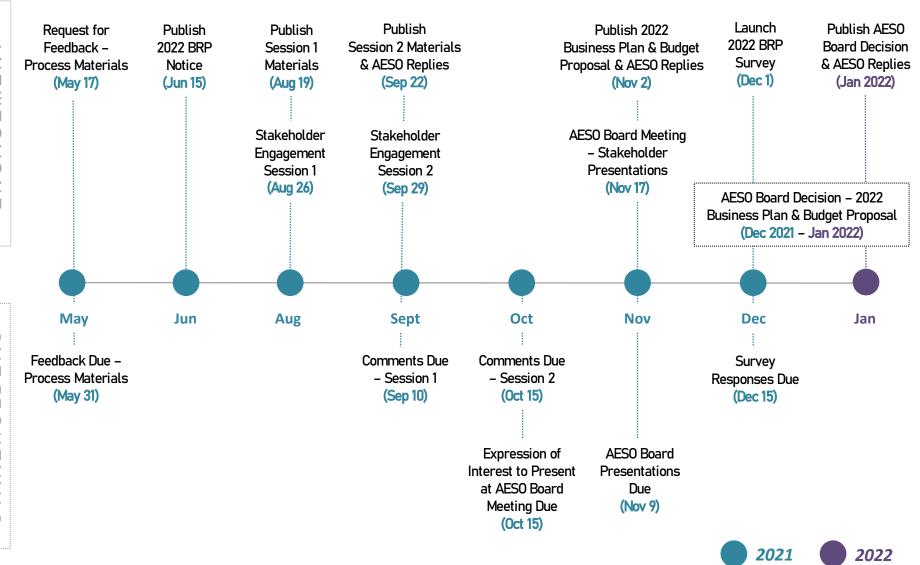
# 2022 BRP process overview





# Stakeholder engagement schedule





# **Key learnings and enhancements**



## Continue

- Engage stakeholders earlier in the BRP process
- Include key VPs in the sessions to answer questions
- Provide materials sooner
- Engage senior level industry CEO Industry and Industry Associations and Agencies Roundtables

#### Enhancements

- Replaced requirement for initial comment matrix on process materials and participation with online registration and request for feedback by email
- Combined Stakeholder Sessions 2 and 3 into a single session
- Specified annual milestones added for Business Initiatives
- Anticipated completion timing added for Business Initiatives
- Simplified Business Planning page of the AESO website





## What are AESO business initiatives?



## AESO business initiatives

- Align with the AESO's Strategic Plan
- Form the basis of the upcoming years' corporate goals and work plans providing organizational direction
- Are the foundation for the development of AESO's budgeted costs
- Tend to be multi-year in nature
- Are typically externally facing
- Significant internal base business initiatives may be highlighted to provide increased transparency to stakeholders

# **Questions to consider**



- As we review the status and next steps of the 2021 multiyear business initiatives and present the initial proposed 2022 business initiatives, questions to consider:
  - What are your views on the proposed next steps and milestones for the 2021 multi-year business initiatives?
  - What are your views on the initial proposed 2022 business initiatives that the AESO has recommended to advance?
  - What are your views on the priority levels of these business initiatives?
  - Do you believe there may be business initiatives the AESO should be advancing which have not already been captured? If so, what would these be?

# **Overview of business initiatives**



2021	2022	2023	2024
General Tariff Application			
Market Sustainability and Evolution*			
Settlement Audit			
Red Tape Reduction			
Optimizing the Grid			
Tariff Modernization			
Distribution Coordination			
Technology Integration			
Proposed: Grid Resiliency			

Lagandi	Complete	Existing Multi-Year Initiative	Proposed Initiative
Legend:	*Merged Market Sustainability and Evolution I & II and Operating Reserve (OR) Market Competitiveness Enhancement Initiatives from 2021 BRP		

# 2021 BRP follow-up



 During the 2021 BRP, stakeholders provided their perspectives on business initiatives they felt the AESO had not captured and believed the AESO should be advancing

## Cost management

- Stakeholder comment: Recommendation that this be a stand-alone priority item
- AESO response: The AESO's strategic focus is on cost management as discussed. Proposed initiatives have elements of cost management (e.g., Red Tape Initiative) and the AESO will have a 2021 corporate goal on cost management to create additional corporate focus
- **Follow-up**: Continues to be a strategic focus. Realized and potential cost savings and/or value derived is noted where applicable in the updates for each of the 2021 multi-year business initiatives

# 2021 BRP follow-up (cont.)



#### Loss factors

- Stakeholder comment: An initiative to provide funding in 2021 to the loss factor group to develop and offer loss factor estimates to project developers
- AESO response: The AESO will explore in 2021 the complexity of providing loss factor estimates at an earlier stage in the connection process
- Follow-up: Incremental loss factor work in 2021 has delayed resource availability.
   Will resource in 2022

## Energy Trading System (ETS)

- Stakeholder request: The AESO should continue to review software modifications to ETS (in 2021 in order to reduce ISO rules contraventions related to the current ETS system)
- AESO response: We will make modifications to ETS and other software when opportunities arise and there is sound rationale to do so
- Follow-up: Modifications were made to ETS based on user feedback to assist in meeting compliance. A "Market Tool User Group" is being launched in Q4 2021 to provide an ongoing process to seek user feedback for additional improvements to ETS and other market tools





# **General Tariff Application (GTA)**



## Mandated - Top Priority Business Initiative - Complete 2021

Initial proposal	2021	2022	
In progress	Update	2022 Base Business Activities Plan	
<ul> <li>Anticipated completion</li> <li>2021</li> <li>GTA will continue to be part of ongoing base business</li> </ul>	<ul> <li>On April 29, 2021, the AUC issued Decision 26215-D01-2021 (as varied in Decision 26215- D02-2021 issued on June 3, 2021) approval of the compliance filing relating to substation fraction equal to one (SSF=1) and Adjusted Metering Practice (AMP)</li> </ul>	<ul> <li>File the AMP implementation plan with revisions to the metering rule with the AUC by January 1, 2022</li> <li>Implementation of the AMP as part of AESO business</li> </ul>	

#### **Objective**

 Implement approved tariff provisions from 2018 GTA into connection process and AESO business

#### Interdependencies

- Tariff Modernization
- Technology Integration
- Distribution Coordination

- Revised ISO tariff took effect on July 1, 2021. Effective date for the commencement of ISO tariff billing applied to specific market participants will be subject to the AUC determinations on the AESO proposed AMP implementation plan
- Addressed the unlimited liability concern for distribution-connected generation (DCG) and an election period for transition to the new tariff, providing greater certainty to investors

#### **Next Steps for 2021**

- Develop an AMP implementation plan with revisions to the metering rule and file with AUC
- Engage stakeholders and file System Project Cost Criteria

# **Market Sustainability and Evolution**



#### **Business Initiative**

#### **Initial proposal**

- In progress
- Merged Market Sustainability & Evolution I & II and OR Market Competitiveness Enhancement from 2021 BRP

#### **Anticipated completion**

- 2022 (dependent on findings)
- Implementation will follow, if determined to be required

#### **Objective**

To maintain the long-term sustainability and competitiveness of the energy-only market structure and to enable the integration of new technologies with a long-term view of potential market changes needed to facilitate continued resource adequacy and increased flexibility with an ever increasing variable system

#### Interdependencies

Technology Integration

#### Update

 Based on results from conducted analyses, Ramp Table and Dispatch Tolerance are to be deferred.

2021

- Internal analysis of OR Market Competitiveness underway
- · Mothball Rule engagement progressing

#### **Next Steps for 2021**

- Continued stakeholder engagement on the proposed changes to ISO rule Section 306.7 Mothball Outage Reporting
- Initiate stakeholder engagement on any identified OR market design changes and corresponding ISO rule changes to enhance competition

#### 2022 Proposed Plan and Milestones

 Progress proposed changes to ISO rule Section 306.7 Mothball Outage Reporting to AUC

- Progress proposed changes to implement OR Market Competitiveness recommendations
- Release update to System Flexibility
   Assessment Report, based on 2021 LTO and scenarios
- Identify other required market initiatives to support long-term sustainability and competitiveness of the energy-only market structure, with a long-term view of potential market changes needed to facilitate continued resource adequacy and increased flexibility with an increasingly variable system (e.g., price cap and floor review, new AS products, dispatch tolerance)

# **Settlement Audit**



Business Initiative					
Initial proposal  In progress	2021	2022			
	Update	2022 Proposed Plan and Milestones			
<ul> <li>Anticipated completion</li> <li>2022</li> <li>Settlement Audits will become part of ongoing base business</li> </ul>	Audit deferred to early 2022 due to COVID-19 and other priorities; however, readiness component is still in progress	Complete Settlement Audit			
	Next Steps for 2021				
Objective • Perform an audit of the AESO's financial settlement processes  Interdependencies	Complete readiness component of Settlement Audit				
No interdependencies					

# **Red Tape Reduction**



## **Mandated – Top Priority Business Initiative**

#### **Initial proposal**

Mandated in 2020

#### **Anticipated completion**

- March 31, 2023
- Red tape will become part of ongoing base business

#### **Objective**

 To be in compliance with the GoA Red Tape Reduction Initiative, the AESO is committed to reducing regulatory requirements by one-third by March 31, 2023

#### Interdependencies

- Tariff Modernization
- Technology Integration

#### Update

 The workplan, prepared in 2020, outlines the sequence of documents to be reworked or removed in order to reduce regulatory requirements as per the Government of Alberta's schedule

2021

- Implementation of the workplan has resulted in a reduction of requirements by 6,820 (22.5%) as of Q2 2021
- Estimated industry cost and time savings to date of \$350K and 2,200 hours, respectively

#### **Next Steps for 2021**

- Continue to advance the workplan with a reduction in requirements via AESO initiated changes to non-authoritative documents in addition to changes that will need to be filed with the AUC for approval, specifically noting the following ISO rules which have one hundred plus requirements in terms of reductions
  - · Section 201.6 Pricing
  - Section 202.6 Adequacy of Supply

## 2022 Proposed Plan and Milestones

 Continue to advance the workplan, specifically noting the following ISO rules which have one hundred plus requirements in terms of reductions

- · Section 203.1 Offers and Bids for Energy
- Section 304.9 Wind and Solar AGF Forecasting
- · Engineering Connection Assessment

# **Optimizing the Grid**



## **Top Priority Business Initiative**

#### **Initial proposal**

In progress

#### **Anticipated completion**

- 2023
- Optimizing the Grid will continue to be part of ongoing base business

#### **Objective**

 Optimize use of existing grid and minimize need or extend timing out for new infrastructure while ensuring reliability and market access

#### Interdependencies

- Distribution Coordination
- Technology Integration
- Market Sustainability & Evolution

## Update

 Using congestion analysis to identify the timing of the planned transmission projects and maximize use of existing infrastructure.
 Pursuing use of flow control devices and line rating upgrades as low-cost solutions to defer new infrastructure.

2021

- Developing the 2022 Long-term Transmission Plan (LTP) focused on risk-based scenarios and optimizing existing network
- Improve system frequency response following a disturbance.
- Cost saving potential for deferring system projects such as PENV, CETO and CRPC

#### **Next Steps for 2021**

- Seek enhanced flexibility to further optimize the network by engaging in the DOE Bulk System Planning engagement
- Create methodology to develop substation level transmission capability maps
- Continuing to develop the 2022 LTP to be published in early 2022

## 2022 Proposed Plan and Milestones

- Publish 2022 LTP and seek stakeholder feedback
- Update stakeholder engagement process on material system NIDs

- Publish first Transmission Capability Map at substation level, coordinated with DFO hosting capability
- Streamline connection process with measurable time and resource savings
- Assess dynamic line rating methodologies and decide on path forward
- Implement any optimization opportunities enable from DOE Bulk System Planning engagement

## **Tariff Modernization**



## **Top Priority Business Initiative**

#### **Initial proposal**

In progress

#### **Anticipated completion**

- 2023
- Will be followed by the implementation of Tariff
   Modernization and any potential related Business Initiative

#### **Objective**

 Modernize ISO tariff price signals and simplify the ISO tariff to be more accessible, clear and agile

#### Interdependencies

- Red Tape Reduction
- Distribution Coordination
- Technology Integration

#### 2021

#### **Update**

- Stakeholder engagement continued on Bulk and Regional Tariff Design. To better address stakeholder feedback, respond to issues raised by AUC staff, and other considerations, the AESO filed a submission with the AUC to extend the filing date of the Bulk and Regional tariff from June 30, 2021 to October 15, 2021, or within eight weeks of the AESO's last stakeholder session, whichever is later
- On June 1, 2021 the AUC issued an approval to the requested extension to October 15, 2021

#### **Next Steps for 2021**

 Continue to work on the Bulk and Regional tariff application to pursue a filing by the date as stated, including Demand Opportunity Service (DOS) Modernization and a proposal for mitigating rate impacts for significantly impacted loads to support a minimally disruptive transition

#### 2022 and 2023

#### 2022 Proposed Plan and Milestones

- AUC proceeding on Bulk and Regional tariff application including DOS modernization
- Initiate consultation on changes to the Customer Contribution Policy
- Progress other identified tariff structure and process improvements
- Additional information on the intent and proposed continued process for <u>Tariff</u> <u>Modernization</u> is also included

#### **2023 Proposed Milestones**

 AUC Decision and AESO compliance filing on Bulk and Regional tariff application including DOS modernization

## **Distribution Coordination**



## **Top Priority Business Initiative**

#### **Initial proposal**

In progress

#### **Anticipated completion**

- 2024
- Distribution Coordination will continue to be part of ongoing base business

#### **Objective**

 Ensure coordination across the distribution and transmission system as the transformation evolves focused on optimizing transmission system while ensuring reliability and market access

#### Interdependencies

- Technology Integration
- Optimizing the Grid
- Tariff Modernization
- GTA
- Market Sustainability & Evolution

#### **Update**

- Q2 published AESO's Decision-Making Framework for responding to DFO system access service request
- Q2 DER locational static data portal launched

2021

- Q1 published DER frequency and voltage ridethrough performance requirements technical paper. Working with DFOs to adopt in DFO interconnection documents
- Potential cost savings by deferring DFO projects through applying Decision-Making Framework

#### **Next Steps for 2021**

- Pursue connection process improvements for DFO reliability and capability projects
- Develop approach to coordinate DFO capability hosting maps with AESO transmission capability assessments
- Engage in policy/regulatory related initiatives to share the AESO's principles and perspectives as it relates to mandate implications
- Facilitate DER access to AESO electricity markets by updating any ISO rules (if needed) to remove unnecessary market access limitations

#### 2022 Proposed Plan and Milestones

Implement connection process improvements

- Implement any changes to facilitate market access for DER
- Assess/align on probabilistic planning as it applies to Transmission/Distribution planning coordination
- Implement necessary additional technical requirements for DER integration

# **Technology Integration**



## **Top Priority Business Initiative**

#### **Initial proposal**

In progress

#### **Anticipated completion**

- 2024
- Technology Integration will continue to be part of ongoing base business

#### **Objectives**

- Enable timely planned integration of new technologies onto the grid and into our markets
- Enable proactive awareness of future new technologies and the potential impacts to reliability, markets and tariffs

#### Interdependencies

- Tariff Modernization
- Market Sustainability & Evolution
- Optimizing the Grid
- Distribution Coordination
- Red Tape Reduction
- GTA

#### **Update**

Drafting first AESO Technology Forward report

2021

- Identifying Energy Storage (ES) rule changes and tariff treatment
- The AESO is planning first Annual Industry Technology Summit for Q4 2021
- Engaged in DOE Energy Storage policy development

#### **Next Steps for 2021**

- Publish AESO's first Technology Forward report focused on the electricity value chain and future implications to the AESO mandate
- Incorporate ES treatment in ISO tariff filing
- Finalize ES rule changes needed and prepare for filing, including changes to implement Adjustment for Load on the Margin (ALM)

#### 2022 Proposed Plan and Milestones

Implement any ES related policy changes

- File ES related rule changes
- Publish supply technology research report
- Sustain Technology Integration processes within the AESO
- Continue implementation for ALM









# **Proposed: Grid Resiliency**



## **Business Initiative (Top Priority)**

#### **Initial proposal**

• Proposed new initiative for 2022

#### **Anticipated completion**

• 2022/2023

#### **Objectives**

- Enhance system frequency response
- Ensure extreme event preparedness across gas/electric interdependencies
- Identify additional reliability needs as supply transforms
- Assess need for climate adaptation plans
- Enhance cyber-security capabilities

#### Interdependencies

- Market Sustainability & Evolution
- Technology Integration

### **Business Initiative Description**

- The AESO recognizes that Alberta's transmission system must be resilient and able to adapt to increasing levels of renewable generation, distributed resources, coal-to-gas conversions, electrification of the transportation system, climate change and cyber threats
- This initiative will focus on ensuring processes are in place to support the resiliency of the Alberta grid including:
  - Enhancing system frequency response
  - Ensuring extreme event preparedness across gas/electric interdependencies
  - Identifying additional reliability needs as supply transforms
  - Assessing need for climate adaptation plans
  - Enhance cyber-security capabilities

# 2022 Proposed Plan and Milestones

- Implement system frequency response improvements including necessary rule changes
- Through senior industry committee, prepare the grid for increased reliance on natural gas for electricity production and coordinate across the gas and electric industries for potential extreme events
- Perform technical reliability needs assessment for high renewable penetrations
- Enhance cyber-security capabilities across the industry through risk-based adoption of enhanced cyber-protection standards, including CIP 013 on supply chain
- Assess climate change implications on our grid infrastructure









## **Next session**



- The AESO will host **Session 2 on Sept. 29, 2021**. An agenda and presentation materials will be posted on Sept. 22, 2021 on our website
- Session 2 purpose:
  - The purpose of the session is to engage stakeholders in a discussion of Session 1 stakeholder feedback, plans for proposed 2022 business initiatives, and preliminary forecasts and budget
- Session 2 objectives include:
  - Share our learnings on Session 1 stakeholder feedback
  - Present, discuss and seek stakeholder input on AESO's consideration of stakeholder feedback and plans for proposed 2022 business initiatives
  - Present, discuss and seek stakeholder input on the AESO's 2022 preliminary forecast and budget information, including:
    - Transmission Operating Forecasts, and
    - AESO Own Costs Budget

# **Next steps**



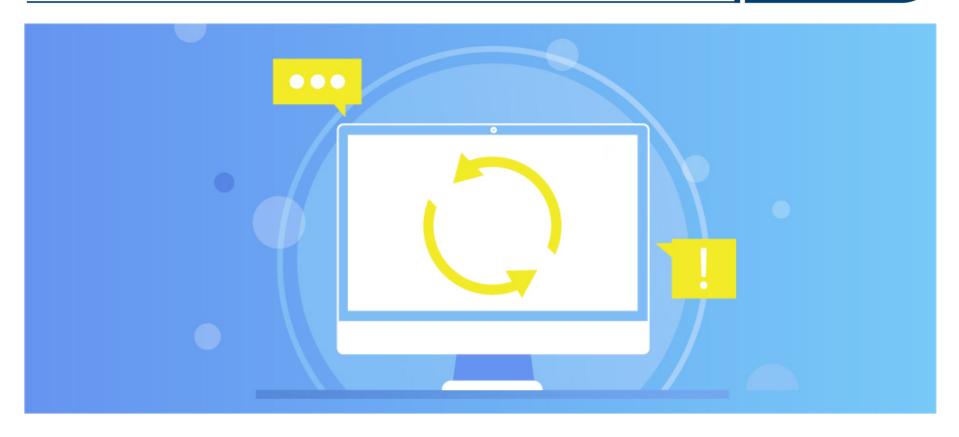
- We want to thank you for attending the 2022 BRP Stakeholder Engagement Session 1 and we would appreciate your feedback on the session
- Launch poll
- We invite all interested stakeholders to provide their detailed input on this session and the business initiatives via the questions set out in the Stakeholder Comment Matrix 2022 BRP Session 1 on or before Sept. 10, 2021. The comment matrix is available on our website at <a href="https://www.aeso.ca">www.aeso.ca</a>
  - Path: AESO > Business Planning
- The AESO will review, consider and respond to stakeholder feedback received. The responses to feedback will be posted on Sept. 22, 2021 on our website





## **Contact the AESO**





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









# **Acronyms**



- ALM = Adjustment for Load on the Margin
- AMP = Adjusted Metering Practice
- AS = Ancillary Services
- AUC = Alberta Utilities Commission
- CETO = Central East Transfer-out Transmission Development
- CRPC = Chapel Rock-to-Pincher Creek Transmission Development
- DER = Distributed Energy Resources
- DFO = Distribution Facility Owner
- DOE = Department of Energy
- DOS = Demand Opportunity Service
- ES = Energy Storage
- ETS = Energy Trading System
- GoA = Government of Alberta
- GTA = General Tariff Application
- LTP = Long-term Transmission Plan
- NID = Needs Identification Document
- OR = Operating Reserve
- PENV = Provost to Edgerton and Nilrem to Vermilion Transmission Development