Market Tools User Group Kick-off Stakeholder Engagement Session

Sept. 21, 2021

Notice

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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 www.aeso.ca. 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.

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Using Zoom – Asking questions

- Two ways to ask questions if you are accessing the webinar using your computer or smartphone

  - Click "Raise Hand" 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. Your name will appear on the screen, but your camera will remain turned off.

  - Click "Lower Hand" to lower it if needed.

  - You can also ask questions by tapping the "Q&A" button and typing them in. You're able to up-vote questions that have been already asked.

- If you are accessing the webinar via conference call

  - If you would like to ask a question during the Q&A portion, on your phone's dial pad, hit *9 and the host will see that you have raised your hand. The host will unmute your microphone, you in turn will need to unmute your microphone by hitting *6 and then you can ask your question. Your number will appear on the screen.

AESO Stakeholder Engagement Framework

OUR ENGAGEMENT PRINCIPLES

Inclusive and Accessible

Strategic and Coordinated

Transparent and Timely

Customized and Meaningful

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

Introduction

Session purpose and objectives

Market Tools User Group

Transparency

Understanding

Collaboration
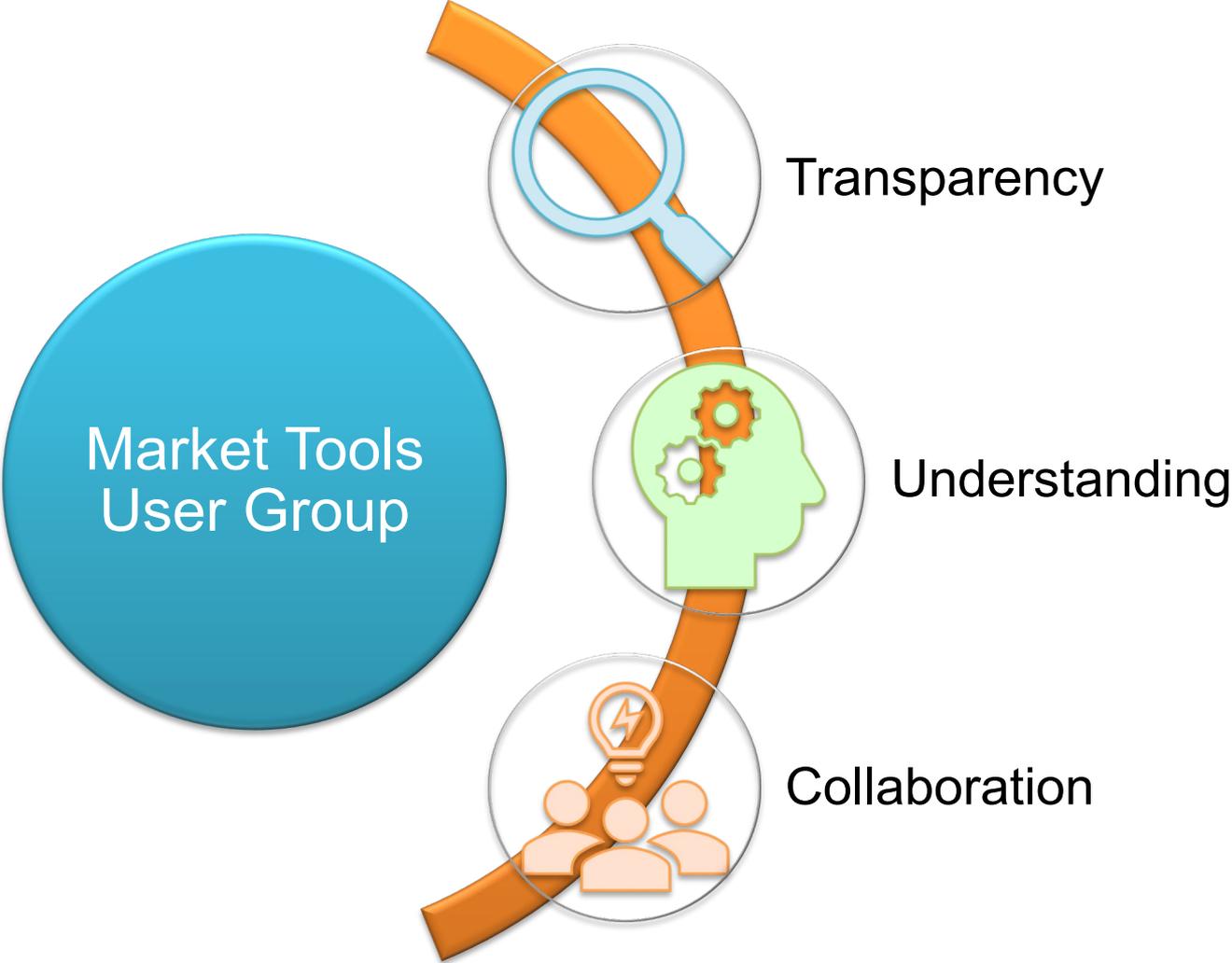
Agenda

Time	Agenda Item	Presenter
9:00 – 9:10	Introductions, purpose, and session objectives	Mark Roberts
9:10 – 9:20	Welcome message	Dennis Frehlich
9:20 – 9:30	Keynote	Murray Mueller
9:30 – 10:15	Market Tools Roadmap	Peter Bahr
10:15 – 10:30	Break	
10:30 – 11:15	Data Interfaces Roadmap	Steven Everett
11:15 – 11:25	Next Steps	Mark Roberts
11:25 – 11:50	Open Q&A	Mark Roberts
11:50 – 12:00	Session close-out	Mark Roberts

Registrants (as of Sept. 14, 2021)

- AltaLink Management Limited
- Apex Clean Energy Inc.
- Best Consulting Solutions Inc.
- Battle River Power Coop
- Capital Power
- Chapman Ventures Inc.
- City of Medicine Hat
- CNOOC Limited
- Dow Chemical Canada ULC
- ENMAX Corporation
- FortisAlberta Inc.
- Hartigen Solutions, LLC
- Heartland Generation Ltd.
- Lionstooth Energy Inc.

- Market Surveillance Administrator (MSA)
- Morgan Stanley
- NorthPoint Energy Solutions Inc.
- NRG Energy
- Nutana Power
- Rodan Energy Solutions
- Stantec
- Suncor Energy Inc.
- TC Energy Corporation
- TransAlta Corporation
- Yes Energy

Welcome

Dennis Frehlich
VP, Grid Reliability

Keynote

Murray Mueller

Director, Operations Systems

Why have a user group?

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Operational Efficiency

Data Security

Streamlined Interaction

Participants

User group goals
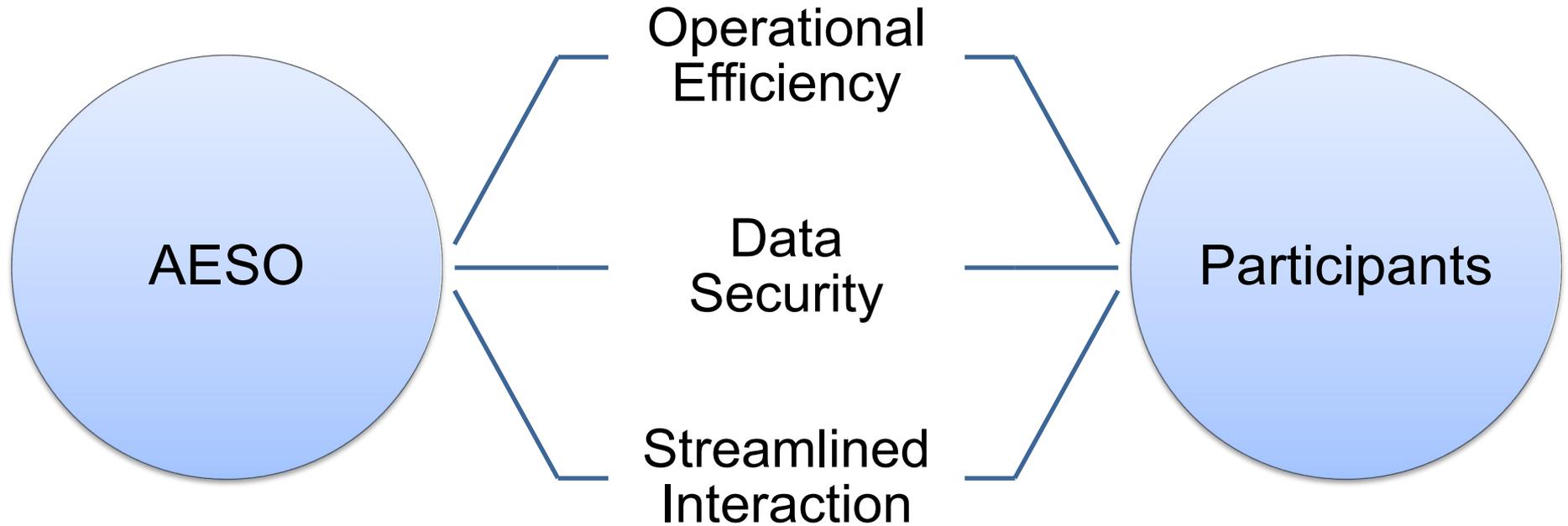
Share the AESO's plans for the market tools and participant data interfaces

Openly discuss the market tools and participant data interfaces with their users

Regularly incorporate market participant feedback and needs into market tool decision making

Deliberate investment approach

- Sustain, enhance and explore
- Cost benefit approach to decision making
- Maximum value at lowest possible cost

What we want

Communication

Transparency in our investment approach

Feedback

Market Tools Roadmap

Peter Bahr

Director, Core Business Solutions

Frame

- Background

  - Market systems are stable

  - Sustain current toolset with small enhancements to meet changing business needs

- Vision

  - Improve market participant's experience with AESO tools

Objectives

- Improve participant engagement within the existing toolset with a focus on efficiency and access to information

  - Dispatch Function – ADaMS (Automated Dispatch and Messaging System)

  - Trading Function – ETS (Energy Trading System)

  - Information Function – interchange, outages, historical and forecast reports

Strategic approach

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Innovate Purposefully

Leverage Cloud capabilities

Agile Delivery

Strengthen the Foundation

Reliability

MP Experience

Cost Benefits

Business Capabilities

Improved MP Experience

Modern Technology

Information Exchange

Strategic Actions → Drivers for Change → Initiatives

Short-term evolution
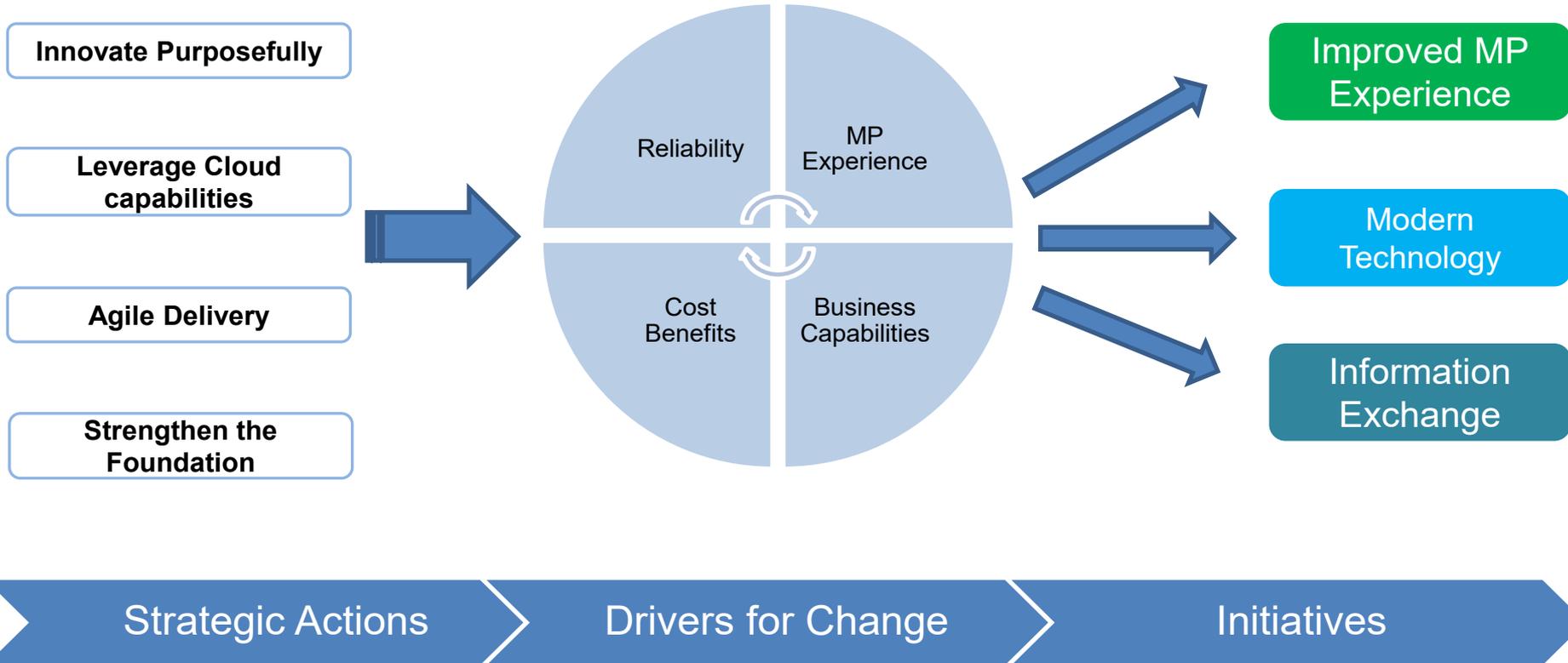
- Completed high availability of ADaMS

- Completed enterprise portal foundations for secure data exchange

- Improved Wind and Solar forecasts

- Completed submission and availability of DER data via portal; more in progress

- Published pool price, SMP, and outage APIs; more in progress

- Systems readied for Energy Storage assets in progress

- Settlement capabilities for adjustment to load on the margin (ALM)

- Modern browser integration

- Cybersecurity improvements ongoing

Long-term evolution

- Enhance market tools to support new generation technologies as required

- Increased collaboration with participants for data exchange via the enterprise portal

- Collaborative process to prioritize system enhancements

- Align planning with evolving market needs

- Enhance reliability and modernization in AESO-built systems

- Advance the integration between market tools and EMS

- Advance market participant data exchange through APIs

Questions?

Break

Data Interfaces Roadmap

Steven Everett

Manager, Market Analytics

Frame

- Background
  - Market participants will require easily accessed, quality data to make informed decisions in support of Alberta's electricity transformation (e.g., increasing renewables, decentralized generation, storage)

- Vision
  - Provide market participants with easier and more efficient access to the AESO's market and other data

Objectives

- Improve market participant access to AESO data
  - More data
  - Easier-to-access data
  - Higher quality data
  - Easier-to-understand data

- Reduce the need for data requests

- Incorporate user feedback on data priorities

- Maintain confidentiality and commercial sensitivity where required

API projects and initiatives

- Objective
  - Expand the programmatic access of public reports via Application Programming Interfaces (APIs), and provide secure, modern external access to data for improved participant engagement and a reduction in the operational impacts due to screen scraping

- Intertie and Pool Price APIs currently available

- Planned APIs include:
  - SMP Public Report
  - Historical Merit Order – Energy
  - Historical Merit Order – AS
  - Current Supply and Demand (CSD) report
  - Actual Forecast report
  - Monthly and Daily Outage reports

- For more information: https://www.aeso.ca/market/market-updates/2021/aeso-application-programming-interface-api/

External data portal pilot project

- Develop a new system to deliver market and other AESO data

- Use Microsoft Dynamics 365 platform, leveraging Microsoft 365 and Azure functions and features

- Improve access to AESO market and other data

- Intended as a complement to APIs

  - May leverage APIs to ensure consistency and accuracy

- Visualizations such as charts and maps

- Currently scoping first iteration; first iteration expected first half 2022

Questions to stakeholders

- What new data would be most useful for the AESO to provide?

- How would you like to see, access, or obtain AESO data?

- What metadata, or other information about AESO data, would be helpful?

- Any other information that might be helpful to the AESO?

- Any other feedback about the AESO's data-related initiatives?

- Would you be interested in joining a focus group to provide additional detailed feedback to the AESO?

Questions?

Next Steps

Next Steps

- The AESO will post a survey link on its website immediately following this session. We invite all interested stakeholders to provide their input via the survey **on or before Oct. 5, 2021**.

- Post survey results on aeso.ca on or before Oct. 19, 2021

- Provide a summary of what was heard (mid-November)

- Provide participants with an update and next steps with respect to this engagement by Dec. 10, 2021

- Define a model for regular communication on the evolution of the market tools, and to collect continuous feedback from the participant user base, to be implemented in 2022

Open Question and Answer Period

Session Close-out

Session feedback

- Thank you for attending the Market Tools User Group Kick-off Stakeholder Engagement Session and we would appreciate your feedback on the session

- Launch Zoom poll

- As previously noted, the AESO will post a survey link on its website immediately following this session. We invite all interested stakeholders to provide their input via the survey **on or before Oct. 5, 2021**.

- The survey results will be available on Oct. 19, 2021, on our website at https://www.aeso.ca/market/market-tools/

Contact the AESO
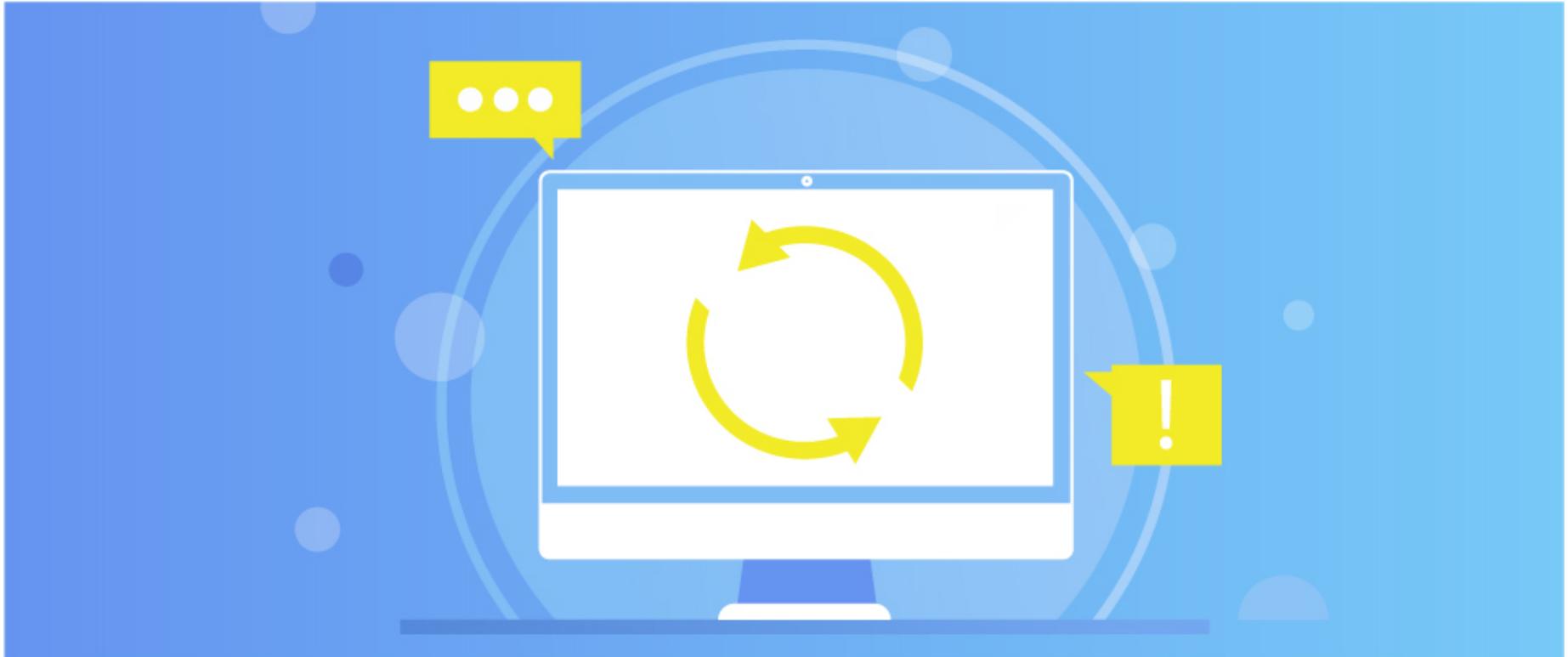
- *Twitter:* @theAESO

- *Email:* info@aeso.ca

- *Website:* www.aeso.ca

- Subscribe to our stakeholder newsletter

Thank You

Appendix – Acronyms

Acronyms

- ADaMS = Automated Dispatch and Messaging System
- ALM = Adjustment to Load on the Margin
- API = Application Programming Interface
- DER = Distributed Energy Resources
- EMS = Energy Management System
- ETS = Energy Trading System
- MP = Market Participants
- SMP = System Marginal Price