



**FEBRUARY 23, 2023**

# 2023 Annual Acquisition Report

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# Welcome and Introduction

- This engagement is conducted according to the [IESO Engagement Principles](#)
- Today's session will be recorded and available for viewing online
- All documents associated with this engagement can be found on the [Annual Acquisition Report](#) webpage

# Participation

- For questions and comments click on the “raise hand” icon (hand symbol) at the top of the application window. This will indicate to the host you would like to speak
- To unmute audio, click on the microphone icon at the top of the application window
- Audio should be muted when not asking a question
- If experiencing connection issues contact [engagement@ieso.ca](mailto:engagement@ieso.ca) or Microsoft Office Support

# Today's Discussion

- Overview of key topics areas of the report
- Opportunity to discuss future participation of existing resources based on uncertainties identified in the 2022 Annual Planning Outlook, including aging assets and market exit
- Help the IESO assess potential risk to future resource adequacy and inform inputs to the analysis undertaken as part of the 2023 Annual Acquisition Report

# Agenda

- Overview of 2023 Annual Acquisition Report (AAR)
  - Objectives and anticipated focus areas
- Future participation of existing resources
- Next steps

# The AAR in the Planning and Procurement Cycle

## Process

1. Identify Needs and Opportunities



2. Identify and Assess Potential Solutions\*



3. Implement Solutions\*

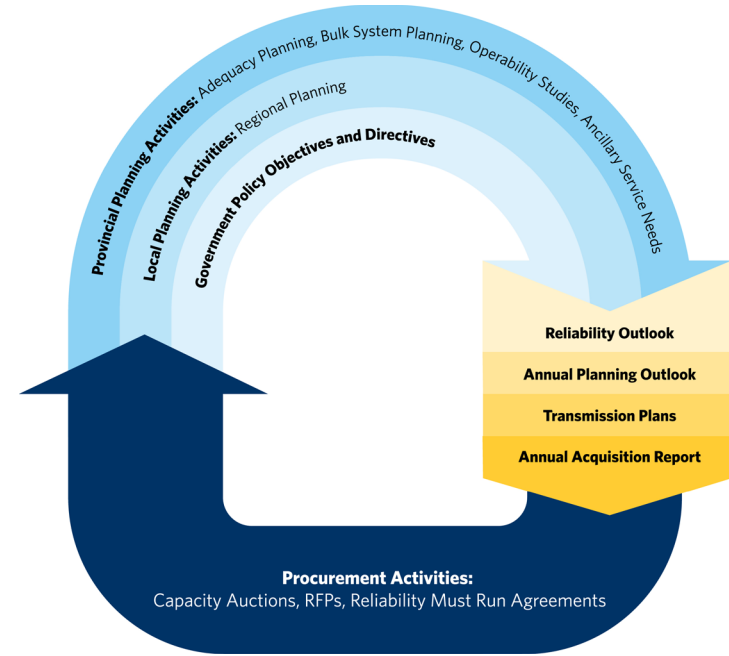


## Vehicle

APO, quarterly Reliability Outlooks, Transmission Plans, P2D, DER Market Vision

**Annual Acquisition Report (AAR)**

Procurement Engagement and Documents



\*The Resource Adequacy Framework provides a suite of tools that can be leveraged to address needs



# 2023 AAR: Objectives and Anticipated Focus Areas

# 2023 AAR: Objectives

1. Provide an update on the previously prescribed 2022 AAR actions and known policy decisions available at the time
2. Define the reliability needs, and provide a broad view of all elements considered in ensuring a reliable system
  - The ongoing procurements and policy decisions play a role in addressing capacity needs mid-decade and contribute to addressing growing needs in 2027+
  - Decarbonization and electrification will greatly change the demand profile and energy needs, signaling the need for a portfolio of new resources
3. Outline the planned actions and supporting initiatives that will be pursued over the coming years to meet reliability needs and support decarbonization
  - Previous AARs covered an outlook period of 10 years; the 2023 AAR will extend the outlook period to 2035 (12 years), which aligns with the timeframe considered in the P2D study and provides stakeholders with a longer look-ahead period



# 2023 AAR: Anticipated Focus Areas (1)

Topic	Sub-Topic	Description
<b>Ontario's Reliability and Resiliency Needs</b>	Capacity Adequacy	Capacity needs will be considered in the near to mid-term to ensure that mechanisms are working to ensure capacity adequacy in Ontario, and to address the significant needs that emerge in 2029 as contracts expire
	Energy Adequacy	Energy needs will be considered to ensure that needs emerging at the end of the decade are met, and to address the anticipated upward shift in the demand curve (as shown in the 2022 Annual Planning Outlook) that indicates the need for longer-duration energy
	Locational Needs	The AAR will reinforce the locational capacity needs identified in the 2022 APO and highlight the areas of the province where capacity may be valued in the procurements
	Operability Needs	The AAR will build on the operability needs assessments in the 2022 APO, with consideration given to the various assessments that will be required to ensure that the changing resource mix has the operability characteristics required to maintain reliability
	Resiliency Needs	The AAR will continue to reinforce the resilience discussion in the 2022 AAR, with a focus on resiliency under extreme weather conditions

# 2023 AAR: Anticipated Focus Areas (2)

Topic	Sub-Topic	Description
<b>Planned Actions to Address Needs</b>	Risk Assessment	The risks and uncertainties considered in the AAR analysis to inform the set of planned actions will be discussed, including the future participation of existing resources
	Capacity Auction	The AAR will provide summer and winter targets for the 2023 auction and five-year forward guidance (out to 2028)
	Medium-term	The AAR will signal any subsequent commitments to re-acquire capacity from the significant amount of resources coming off contract
	Long-term	The AAR will signal the acquisition of any incremental new capacity to address the growing capacity and energy needs in 2029 and beyond
<b>Supporting the Energy Transition</b>	Various	The AAR will discuss a number of initiatives that can support the energy transition, which may include: enabling resources, the role of energy efficiency, reliable operation of existing assets and activities to prepare for grid transformation



# Future Participation of Existing Resources

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- The 2022 APO identified uncertainties that could influence the outlook on capacity and energy adequacy; a number of these uncertainties relate to the future participation of existing resources, which could impact supply
- NERC's 2022 LTRA cites the importance of managing the pace of generation retirements and cautions attention to resulting resource mix reliability attributes
- The sector recognizes these uncertainties may lead to some resources participating differently or exiting the market
- In recognizing this potential risk to future resource adequacy, beginning with the 2023 AAR and informed by stakeholder input, the IESO intends to consider in its analysis that some resources exit the market

NERC: North American Electric Reliability Corporation;  
LTRA – Long-Term Reliability Assessment

# Supply Side Risks – Existing Resources

## Aging Assets & Decreased Performance



Impact on Supply

- Large portion of fleet is aging
- Level of performance and reliability decreases with age of asset
- Increase in frequency and duration of outages

## Policy and Regulatory Uncertainty



Impact on Supply

- Policy uncertainty with the CER and next steps on P2D
- Regulatory uncertainty regarding CNSC's approval of Pickering extension

## Market Exit



Impact on Supply

- With an aging fleet and uncertainty with the CER, a portion of resources are expected to no longer participate in the market
- NERC's LTRA cites the importance of managing the pace of retirements

CER – Clean Electricity Regulations; NERC: North American Electric Reliability Corporation; LTRA – Long-Term Reliability Assessment; CNSC – Canadian Nuclear Safety Commission

# Input – Future Participation of Resources

- The IESO is engaging directly with Market Participants to better understand the risks and considerations for existing assets to inform the 2023 AAR
- Key themes from discussions are summarized in the following slides regarding future participation of existing resources
- Additional feedback following today's meeting will be used to inform the 2023 AAR

## Feedback – Key Themes (1)

- Stakeholders acknowledge the IESO recognizing market exit as an uncertainty and considering an assumption that recognizes that not all facilities will participate in our market at the same level as today
- Asset owners would like to continue operating beyond current contract expiry and are exploring options, but require sufficient lead time to make decisions:
  - Running facility until end of life
  - Extending life of facility, requiring significant capital investments
  - Re-powering the facility (e.g., re-building the facility to replace old and less efficient equipment, co-locating storage, hydrogen). Depending on the extent of change, re-powered facilities may be better considered similar to a new-build facility with appropriate lead times and contract design

## Feedback – Key Themes (2)

- Several factors may impact asset owner decisions on future participation of existing facilities:

### **Asset Owner Considerations**

- Significant capital investments needed to extend asset life. Assurance of mechanism to sufficiently recover costs is needed to ensure revenue adequacy
- Competition for capital investments for opportunities outside of Ontario
- Corporate ESG mandates and impact on decisions, specifically for gas facilities

### **External Factors**

- Technological readiness, innovation and investment in re-powering (hydrogen, renewable natural gas)
- Ability to understand market revenue opportunities in the renewed market (post-MRP) and the impact on cost recovery
- Uncertainty with the CER and impacts on future participation of gas fleet & fuel security
- Municipal support
- Necessary transmission for upgrades and re-powered facilities



## Feedback – Key Themes (3)

- Stakeholders would like an understanding of the future resource acquisition opportunities with sufficient lead time to make internal decisions, and items for consideration could include:
  - Acquisition activities be more frequent and for smaller targets
  - Contract term lengths be flexible, allowing proponents to compete on term length
  - Keep procurements simple and less prescriptive; explore other commercial contract structures
  - Allow bridging opportunities for existing contracts to account for the necessary lead time for re-powering or extending the useful life of an existing facility

# Request for Feedback

- The IESO will consider all input on this engagement and a feedback form is posted on the [AAR engagement webpage](#)
- Feedback is due by March 9, 2023
- Please contact [engagement@ieso.ca](mailto:engagement@ieso.ca) if you have questions following this session

# Next Steps

## Timing

## Engagement Activity

March/April

Identify how feedback on the future participation of resources has been translated into an assumption(s) for the 2023 AAR analysis

Mid-Year

Anticipated release of 2023 AAR

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# Thank You

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