Expanding Participation in Operating Reserve and Energy

May 21, 2020



Meeting Participation

- Webinar participation (including audio):
 - https://www.meetview.com/EPOR-E/
 - Use the "Ask a Question" function to submit a question during the webinar
- Teleconference participation (audio only):
 - Local (+1) 416 764 8640; Toll Free (+1) 888 239 2037
 - Press *1 to alert the operator that you have a question
- When asking a question, please state your name and who you represent so those participating are aware
- This webinar is conducted according to the IESO <u>Engagement</u> <u>Principles</u>



Purpose

 To provide an overview of the Expanding Participation in Operating Reserve and Energy (EPOR-E) project and to announce the launch of the EPOR-E stakeholder engagement



Agenda

- Drivers for EPOR-E
- MDAG and EPOR-E Engagements
- New EPOR-E Engagement
- Next steps

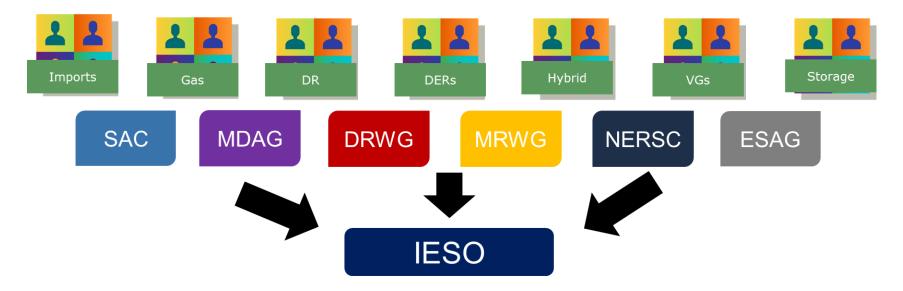


DRIVERS FOR THE EPOR-E PROJECT



The Need for EPOR-E

• Through many different forums, stakeholders have requested that the IESO investigate changes that could allow their resource types to participate in the energy and operating reserve (OR) market



• The IESO is continuously working towards improving market efficiency and grid reliability. Ontario's supply mix also continues to evolve and there is an increasing need for additional flexibility on the system



Benefits of Greater Participation

- Increasing participation from more resource types leads to greater diversity and competition in the IESO-administered markets resulting in enhanced reliability and lower costs
 - Enabling a broader range of participants will increase liquidity, facilitate competition, while lowering costs and increasing market efficiency
 - Greater participation could provide operational, reliability, and resilience benefits by increasing capability from a more diverse range of resources, which is important in the context of a changing supply mix
 - Addresses stakeholder requests to ensure they can access market revenues to lay the foundation for revenue stacking









MDAG AND EPOR-E ENGAGEMENTS



MDAG and Work Plan Recap

- The Market Development Advisory Group (MDAG) formed in 2019 to support IESO efforts to evolve the Ontario electricity market, beyond the Market Renewal Program, to cost-effectively ensure reliability in the near and longer terms.
- MDAG is a transparent stakeholder forum discussing market design ideas and issues presented by the IESO and stakeholders. Through these discussions and the development of a work plan, the IESO can leverage MDAG member expertise to help drive market change.
- The work plan establishes the criteria to evaluate market design initiatives and provides a road map of what projects the IESO intends to work on.



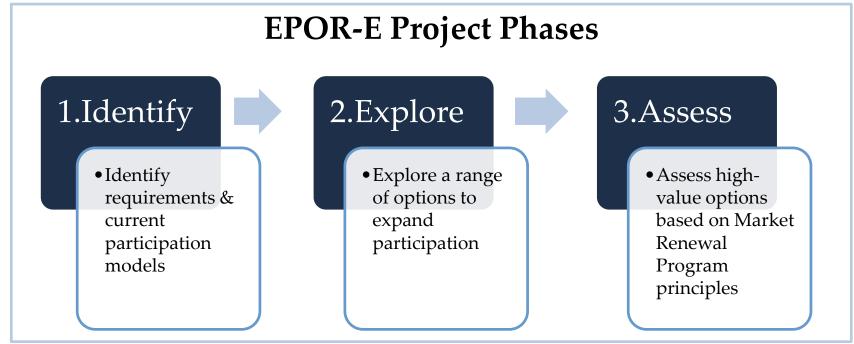


MDAG 2020 Work Plan

- Throughout 2019, the MDAG held meetings to decide on the initiatives to be included in the 2020 Work Plan
- MDAG members agreed on the following initiatives for focus in the 2020 Work plan for their ability to increase competition and costeffectiveness in the IESO-Administered Markets
 - Expanding Participation in Operating Reserve and Energy (EPOR-E)
 - Increasing Competition in Ancillary Services (on hold)
 - <u>Transmission Rights Market Review</u> (continuing as separate stakeholder engagement)

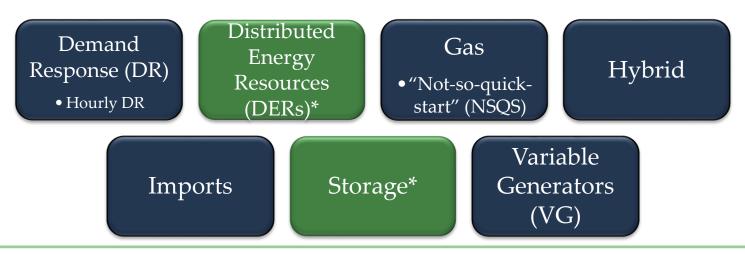
EPOR-E Backgrounder

- EPOR-E is a **scoping and assessment** exercise that will identify high-value projects to consider for future implementation
- In March, the IESO published the <u>scope of work (SOW)</u> for the EPOR-E initiative for stakeholder review and feedback



Technologies to be Assessed

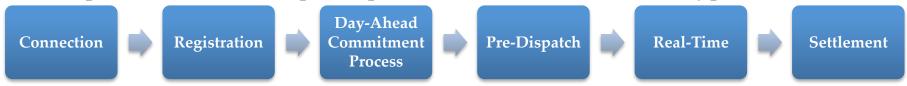
- EPOR-E will look at misalignments between IESO requirements and the participation models of the following technologies, and assess the IESO's ability to adjust requirements, processes, tools, and participation models to enable further participation
- Based on the IESO's discussions with stakeholders through the MDAG work plan process, the following technology types are to be studied in EPOR-E initiative:



^{*}DER development is the focus of the Innovation and Sector Evolution Whitepaper Series and directly-connected storage is the focus of the Energy Storage Advisory Group's (ESAG) Storage Design Project

High-Level Summary of Project Phase 1

- As part of the April 2 MDAG meeting, the IESO presented its findings to date on Phase 1 of the project
- Phase 1 involved reviewing the requirements of each stage of the market registration process and identifying opportunities to align those requirements with the participation models of the resource types identified



- Requirements and opportunities for alignment to enable OR market participation can be summarized into three areas:
 - **Dispatchability** the resource can be dispatched for a contingency
 - **Telemetry** the IESO can monitor the response and effect of the response on the IESO controlled grid
 - **Certainty** there is certainty that the resource will be able to provide the service when called upon
- Further details can be found in the <u>April 2nd presentation</u>



EPOR-E Engagement to Date

- Feedback was requested on the information presented in the April 2 MDAG webinar by April 27. Specifically, the IESO sought feedback on:
 - Further details, including information from experience in other jurisdictions, on participation models for hybrid resources, mainly generator or load resources utilizing behind-the-meter storage
 - Whether the information presented has properly captured the requirements to participate and the opportunities that should be explored to enable other resources to participate
 - Similar participation issues in other jurisdictions and how they could be resolved in Ontario

NEW EPOR-E ENGAGEMENT



A Clear Focus on EPOR-E

- During the April 2 webinar, MDAG members indicated they found it difficult to engage with the IESO and fellow members in an open discussion format that they had previously indicated was of most value to the membership and IESO
- Additionally, there has been broad interest in this engagement from stakeholders who are not members of MDAG.
 - Questions were received from these stakeholders about whether they were to engage equally with MDAG members and the IESO on the content being discussed in the webinar
- To reconcile this feedback and ensure alignment with the initial purpose and intent of the MDAG as an advisory group, the EPOR-E initiative will be continued as a separate stakeholder engagement
- MDAG will continue with its original focus on advising the IESO on the future evolution of the Ontario electricity market



New EPOR-E Engagement Approach

- EPOR-E will be launched as a separate stakeholder engagement with its own engagement web page, plan and schedule that aligns with what was previously discussed with the MDAG
- Materials related to this engagement will be posted on the EPOR-E engagement web page and engagement meetings/webinars will be conducted separate from MDAG meetings
- The engagement plan and schedule has factored in updates at future MDAG meetings before major milestones and decision points are completed in order to ensure the MDAG has an opportunity to provide advice and guidance and to ensure alignment with the goals of the 2020 Work Plan
- This new approach will make clear that participation is open to all stakeholders and bring the MDAG into alignment with its original stated objectives outlined in the Terms of Reference
- Feedback on this engagement approach and the engagement plan can be provided to engagement@ieso.ca

NEXT STEPS



Next Steps

- The draft Phase 1 memo will be posted to the engagement web page in June for stakeholder review and feedback
 - Feedback received following the April 2 webinar will be included in the memo
- Following the posting of the Phase 1 memo, Phase 2 of the EPOR-E stakeholder engagement will continue with a focus on exploration of options to enable additional resource types based on the alignment opportunities identified in Phase 1



Questions?

