

# INITIATIVES RELATED TO DISTRIBUTED ENERGY RESOURCES (DERs)

## ONTARIO ENERGY BOARD (OEB)



### GOAL

To facilitate DER adoption and integration that enhances overall value to energy customers.



### FOCUS AREAS

Provide regulatory clarity by developing and/or amending OEB requirements, guidelines and utility incentives to reflect the presence of DERs.

### Framework for Energy Innovation: Distributed Resources & Utility Incentives

Facilitate the deployment and adoption of innovative and cost-effective solutions, including distributed resources, in ways that enhance value for energy consumers. Increase regulatory clarity in the treatment of innovative technologies and approaches.

### EV Integration

Facilitate the efficient integration of EVs and ensure that regulatory guidance and requirements remain current as EV adoption increases and technologies evolve. This initiative will consider issues and opportunities related to system readiness, delivery costs, and EV connections.

### DER Connections Review

Identify any barriers to the connection of DERs, and, where appropriate, standardize and improve the connection process. The review is focused on connection of electricity generation and storage facilities connected to the distribution system, either in front or behind the distributor's meter.

### Energy Transition Roadmap

Leverage stakeholder input to map out the OEB's short-term and medium-term priorities related to the four Ds of the energy transition: decarbonization, decentralization, democratization and digitalization.

### Regional Planning Process Review (RPPR)

Increase efficiency and effectiveness of regional planning process. The OEB's Regional Planning Process Advisory Group provided recommendations to make improvements in the process. The OEB responded with an implementation plan and is currently moving forward on those recommendations.



## OEB/IESO Joint Targeted Call

The IESO Grid Innovation Fund in collaboration with the OEB's Innovation Sandbox held a joint targeted call to support research and demonstration projects that will test DER capabilities to provide services at both the wholesale market and distribution levels. Results will be input into the DER Market Design project and OEB's ongoing policy development efforts.

## IESO/OEB Study of DER Incentives

Joint IESO-OEB study to create a better understanding of how financial incentives for DERs in Ontario function collectively to ensure that different incentives aren't working at cross purposes and are achieving the most efficient outcomes.

## INDEPENDENT ELECTRICITY SYSTEM OPERATOR (IESO)



### GOAL

To maximize the value DERs can provide to Ontario's electricity system by addressing challenges and opportunities within the IESO's mandate.



### FOCUS AREAS

- *Non-Wires Alternatives (NWA)* – The IESO will implement the recommendations identified in the RPPR to support consideration of feasible NWA solutions to meet regional needs
- *Wholesale Market Integration* – The IESO will seek to expand competition by enhancing opportunities for DERs to compete to provide wholesale services
- *Transmission-Distribution (T-D) Coordination* – The IESO will work with others in the sector to ensure there is appropriate T-D coordination to deliver a reliable and efficient supply of energy to Ontarians

### DER Market Design Project

This initiative will enhance opportunities for DERs to compete to provide wholesale services. As part of the DER Market Vision Project, the IESO will publish the foundational models by Q1 2023, establishing the framework for the DER Market Design Project and implementation efforts.

### DER Potential Study

Published in June 2022, this study identifies the types and volumes of DERs that may emerge in Ontario over a ten-year timeframe, and the potential for these resources to provide grid services. The findings of the study will inform wholesale market or program design priorities to capture value from DERs.

### T-D Coordination Demonstrations and Studies

The IESO is investigating T-D coordination frameworks and protocols to ensure that DER can participate in the wholesale market and provide distribution-level services in a reliable manner. These efforts include the IESO York Region NWA Demonstration as well as collaboration among IESO, Local Distribution Companies and industry stakeholders through the IESO's Transmission.

### RPPR NWA action items

This effort is aimed at implementing the regional planning process updates identified in the RPPR, including developing tools/strategies for defining a NWA need, determining the economic value of a NWA, and identifying potential acquisition methods for NWAs.

### CDM Local Initiatives Program

As part of the 2021-2024 CDM Framework, local initiatives are being developed in collaboration with Hydro One, Hydro Ottawa and Alectra to deliver CDM savings in four targeted areas of the province with identified system needs.

### Energy Efficiency (EE) Auction Pilot

Pilot to test an auction-based mechanism for procuring EE and non-dispatchable load shifting projects to inform future consideration of enabling EE to compete to meet system needs.