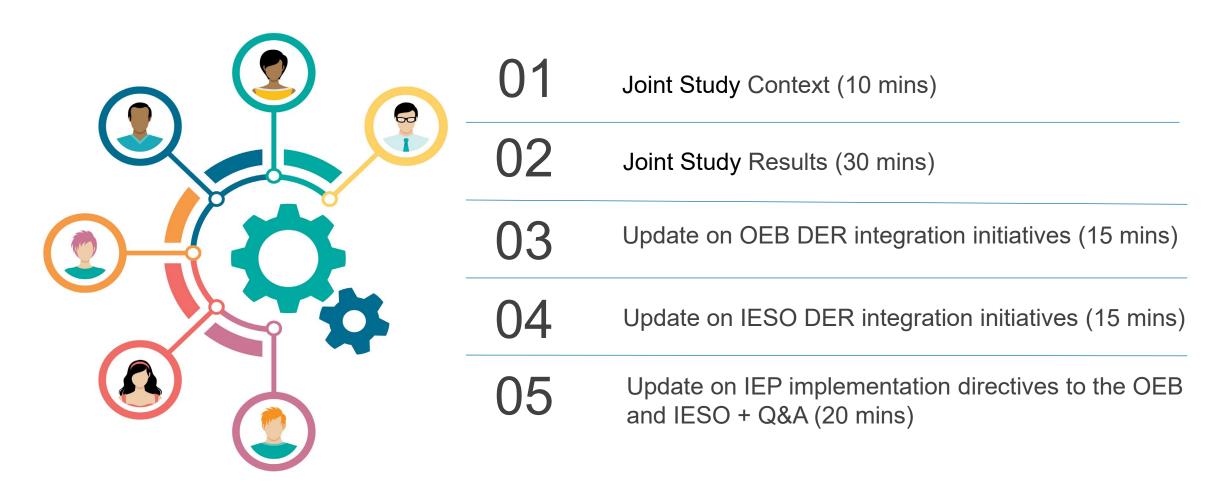


# OEB-IESO Engagement on the Assessment of Ontario's DER Compensation Mechanisms and Recommendations (Joint Study)

## Agenda





## Recap of IESO and OEB Goals for DER Integration

#### **OEB**

To facilitate DER deployment and adoption that enhances overall value to energy consumers

#### **IESO**

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

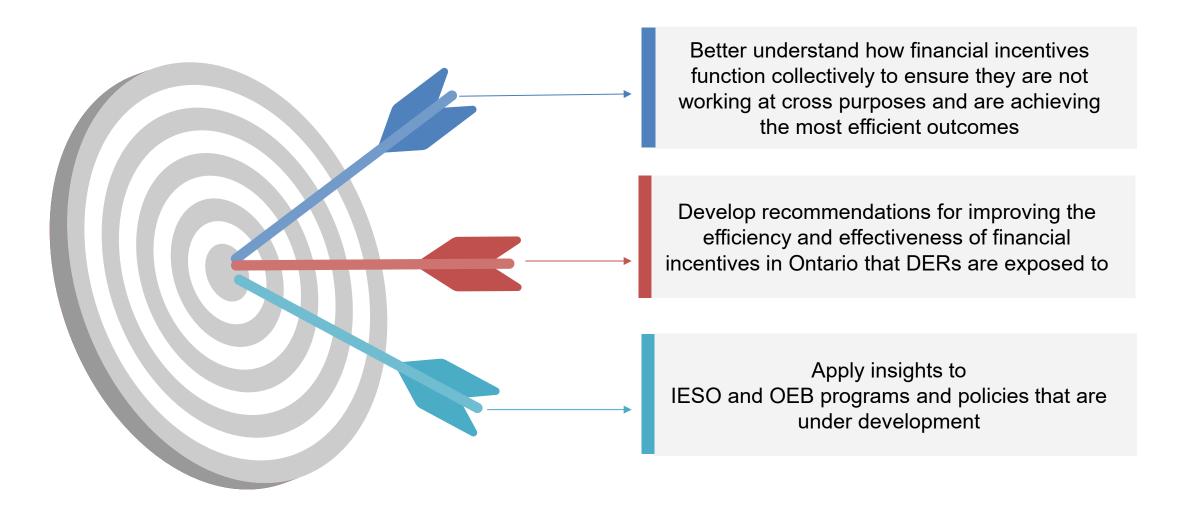


## Overview of the OEB-IESO Joint Study

- Compensation Mechanisms affecting DERs are a cross-cutting issue in the purview of the OEB and IESO
- Stakeholders have expressed the desire for collaboration between the OEB and IESO to improve the
  efficiency and alignment of compensation mechanisms that affect DERs
- Getting compensation right helps send better signals for investing in and operating DERs, which can help facilitate cost-effective DER integration, unlock the value they can deliver to the energy system, and support the broader electrification of Ontario
- In 2023, the OEB and IESO commissioned a joint study of DER compensation mechanisms
- The study was prepared by the Brattle Group, a consulting firm that focuses on complex economic, regulatory and financial questions
- The Ministry of Energy and Mines' Integrated Energy Plan (IEP) and associated Implementation Directives to the OEB and IESO sets out actions to support cost-effective DER integration, including some related to the study's recommendations



## Joint Study Objectives







## Update on OEB DER Integration Initiatives

#### **OEB DER Initiatives**

The Ministry of Energy and Mines' Integrated Energy Plan (IEP) and associated Implementation Directive to the OEB sets out actions to support cost-effective DER integration. Some of these actions relate to the study's recommendations while others are focused on areas such as planning for DERs and DER connections. Initiatives that belong to the latter are identified below.

Initiative	Description
Define roadmap for DSO Capabilities	Outline how and when DSO capabilities could be developed and implemented, based on system needs, value, and flexibility to adapt to future changes
Review DER Valuation	Assess and provide an update on actions regarding the overall regulatory and compensation frameworks so they reflect the true system value of DERs
Develop cost pooling mechanisms for DERs	Explore cost recovery mechanisms for DERs across utility boundaries to support broader system benefits
Streamline DER Connection Practices	Improve transparency, reduce timelines and costs, and provide clearer guidance and processes related to DER hosting capacity
Establish standard DER data collection and sharing protocols	Establish protocols for collecting and sharing DER data to inform cost-effective DER deployment
Consolidated capacity and hosting maps	Develop consolidated maps displaying available distribution system loading capacity and potential DER hosting capacity for all customer types
Cost responsibility rules for DER Connections	Review current cost responsibility rules for DER connections and propose recommendations to the OEB to provide guidance and clarifications to the industry

**Next steps**: These initiatives, along with those that relate to the study's recommendations, will be advanced as part of OEB's integrated DER portfolio. Progress and outcomes from each project will inform the others, ensuring that work is coordinated, complementary and not pursued in isolation.

## DER Initiatives Related to Study Recommendations

OEB actions are underway that address some of the recommendations in the Joint Study:

Recommendation	OEB Policy Initiatives	
	Non-Wires Solutions Guidelines (NWS) for Electricity Distributors	
Continue to incorporate non-wires solutions (NWSs) in distribution system	Benefit-Cost Analysis (BCA) Framework for Addressing Electricity System Needs	
planning	Distributor incentives for using third-party DERs as NWSs	
Introduce further rate improvements / options for non-RPP Class B customers	Dynamic pricing options for Non-RPP Class B electricity customers	
Examine alternative transmission cost recovery methods that align with system needs	Electric Vehicle Charging Rate	



### Incorporating NWSs in Distribution System Planning

#### **NWS Guidelines**

The <u>NWS Guidelines for Electricity Distributors</u> n the role of non-wires solutions (NWSs), including conservation and demand management (CDM), for rate-regulated electricity distributors, including the treatment of NWSs in distribution rates. Replaces the previous CDM Guidelines.

**Current Status:** Issued in March 2024, the Guidelines are currently active and sets the expectation that rate applications be consistent with what is outlined in the Guidelines

#### **BCA Framework**

Phase One of the BCA Framework established a standardized methodology that distributors are to employ to assess the economic feasibility of using NWSs, including DERs, to meet distribution system needs.

**Current Status:** Work is underway for Phase Two of the BCA, as part of OEB's integrated DER portfolio, which will better support distributors' ability to accurately assess NWS feasibility by providing further guidance on input values and consider incorporating societal impacts.



## Incorporating NWSs in Distribution System Planning (cont'd)

#### Distributor incentives for using third-party DERs as NWSs

The NWS Guidelines require distributors to demonstrate consideration of contracting services from third-party DER providers (i.e., DERs not owned by distributors).

#### Distributors are eligible for incentives for using third-party DERs as NWSs:

- Shared savings mechanism
- Performance target/scorecard
- Margin on payments (MoP)

<u>Incentive filing guidelines</u> support the development of proposals by providing guidance on information requirements, while leaving flexibility for distributor creativity.

**Current Status:** A Notice of Proposal was issued in May 2025 to amend the Distribution System Code (DSC) to set a default MoP value of 25%, limited to 50% of the net benefit of the proposed solution, as determined by the BCA Framework. The OEB is reviewing stakeholders' written comments on the proposed DSC amendments.



### Exploring Further Rate Options for Non-RPP Class B Customers

#### **Dynamic pricing options for Non-RPP Class B electricity customers**

The electricity commodity rate that non-RPP Class B customers pay is not cost-reflective. The OEB has identified two opt-in **dynamic pricing options for non-RPP Class B customers** to align their prices with the costs that their electricity use imposes on the electricity system:

- 1. Non-RPP Time-of-Use: fixed GA price depending on the period of day.
- 2. Real-Time Price: hourly GA price that correlates with Ontario demand.

The alternative plans provide more effective price signals to align DER operation/use with system needs.

Current Status: A Price Design Report with recommendations has been delivered to the Ministry.



## Implementing Alternative Transmission Cost Recovery Methods

#### **Electric Vehicle Charging Rate**

The OEB released its final report on the design of an opt-in EV Charging Rate (EVC Rate) for publicly accessible EV charging stations. The EVC Rate better aligns participants' Retail Transmission Service Rates (RTSRs) with the transmission system costs to serve them – participants will pay 17% of the base RTSR that they would otherwise pay.

Participants may also include DERs, which could also help shape their loads in ways that are better aligned with system conditions.

**Next Steps:** Distributors will begin offering the EVC Rate as early as January 2026. Additional OEB work is underway to support implementation (e.g., development of an EVC Rate opt-in form).

Note: RTSRs are charges that distributors apply to end-use customers to collect the wholesale transmission line connection, transformation and network charges that distributors owe to electricity transmitters.



#### **AUGUST 22, 2025**

## DER Related Updates from the IESO

OEB-IESO Engagement on the Assessment of Ontario's DER Compensation Mechanisms

and Recommendations Report (The 'Joint Study')

#### **Brennan Louw**

Market and Sector Evolution, IESO



## Overview

- This presentation provides a brief overview of the IESO's current, in development, and future DER activities that relate to the recommendations in the Joint Study
- Since the inception of this study, the IESO and the sector have made progress advancing opportunities for DER participation; there are now several mechanisms available or in development for DERs to provide bulk services in Ontario
- Ontario's Integrated Energy Plan (IEP) builds on the foundation of current DER integration efforts and provides direction to the IESO that can help to address the study's recommendations in continued collaboration with the OEB



## Provide Opportunities for DERs to Participate in Procurement Processes Where They are Capable of Meeting Service Requirements

#### Current

- Medium- and Long-term IESO procurements are open to standalone DERs that register as dispatchable market participants (≥ 1MW)
- Capacity Auction allows certain standalone DERs and DR aggregations (≥ 1MW)

#### **In Development**

- The Enabling Resources Program (ERP)'s DER Integration Stream will provide a pathway for DERs (including aggregations) to be considered for future procurements
  - This will be balanced against the availability of other mechanisms for DER participation

#### **Future**

 IESO will continue to enable broader DER eligibility in IESO procurements, in alignment with the IEP Directive



## Provide a Pathway for Customers with DERs to Participate and be Appropriately Compensated in the Wholesale Energy Market

#### **Current**

The Market Renewal Program (MRP) improves market price signals (more reflective of system value) for market participants, including those that use DERs

#### **In Development**

 The Enabling Resources Program (ERP) will expand market participation opportunities for DERs and DER Aggregations (DERAs) and advance opportunities for transmission-distribution coordination and value stacking

#### **Future**

 Continued market and sector evolution will build on the market participation models advanced by ERP and seek ways to align non-market participating DERs with market and system operations



## Leverage Programs to Unlock DER Value Streams and Provide Important Grid Services

#### Current

- The eDSM directive expanded the scope of IESO DSM programs to include DERs
- IESO's Save On Energy programs now have incentives for DERs
  - Demand response for residential & small business (Peak Perks), residential rooftop solar and storage (Home Renovation Savings Program), and non-residential rooftop solar (Retrofit Program)

#### **In Development**

- Save on Energy Commercial HVAC Demand Response Program (planned launch in 2026)
- Local Generation Program (potential launch in 2026) aims to provide simplified procurement for existing and new distributed generation facilities sized between 100 kW and 10 MW

#### **Future**

IESO's eDSM programs to consider more opportunities for DERs, in alignment with IEP Directive

Connecting Today. Powering Tomorrow.

## Continue to Incorporate Non-Wires Solutions (NWS) in Distribution and Regional Planning

#### Current

- IESO has a formalized process for <u>evaluating NWS</u> (including DERs); Regional Planning is currently underway in Toronto, Ottawa, York Region, GTA West, London Area, GTA East, Kitchener/Waterloo/Cambridge/Guelph, and Peterborough to Kingston
- IESO's Local Initiatives Program targets specific high-needs areas informed by outcomes of regional plans - with some customer-sited DERs eligible for incentives

#### In Development

- Consultation is underway (led by OEB) on a joint LDC/IESO proposal for a framework for implementation of local eDSM programs to address distribution needs (<u>'Stream 2'</u>)
- ERP will advance opportunities for transmission-distribution coordination and value stacking for dual purpose DERs



## Continue to Incorporate Non-Wires Solutions (NWS) in Distribution and Regional Planning - Continued

#### **Future**

- Utilizing eDSM Stream 2 and the Local Generation Program for NWS
- Per the IEP directive:
  - the IESO's planning processes to consider cost-effective DER deployment to meet needs
  - with the OEB's lead, work with the OEB to explore opportunities for distributor-led DER procurements





## **Update on IEP Implementation Directives**

### Energy for Generations - Integrated Energy Plan (IEP)

## IEP objectives

Released in June 2025, *Energy for Generations* describes Ontario's long-term objectives for energy use across the economy and all sources of energy. The IEP also details actions that will be taken by the Ministry, OEB and IESO to meet energy needs and keep Ontario's energy system clean, affordable, reliable and secure over the long term.

## Unlocking the value of DERs:

The IEP outlines, amongst other priorities, a plan to leverage DERs as reliable, low-cost providers of grid services, and commits to reviewing how DERs are valued to ensure compensation better reflects the services they provide to the grid.

## OEB and IESO Implementation Directives:

Outline the OEB and IESO's roles in IEP implementation, including specific actions to support unlocking the value of DERs.

August 22, 2025 21 ONTARI ENERGY BOARD

#### IEP: Coordinating OEB and IESO Efforts to Unlock the Value of DERs

#### **Policy Objectives:**

The IESO and OEB will continue to take steps to ensure DERs are deployed in Ontario in ways that reflect their value to different levels of the electricity system.

Our organizations are focusing our efforts on three key areas:

- 1. Planning: ensuring planning processes consider DER opportunities and distributors are equipped to make sound grid modernization investments.
- 2. Valuation: ensuring DERs are compensated for the value they bring to the electricity system and are exposed to appropriate price signals.
- **3. Connections**: ensuring DERs are swiftly connected, with due consideration to their system impacts.

Our organizations are collaborating to prioritize, sequence and co-ordinate progress on action items set out in the IEP directives to optimize execution, sector engagement and support the IEP goal of unlocking the value of DERs.



## Jointly Advancing the DER Strategy

The OEB and IESO will continue to work with sector participants to advance specific DER activities set out in our respective IEP implementation directives.

OEB Action Items	Linkage	IESO Action Items
Report-back on DER valuation and compensation framework	Inform Support	<ul> <li>Enable broader DER eligibility in IESO procurements/programs</li> <li>Support OEB's review of DER valuation</li> </ul>
Report-back on DER valuation roles and explore opportunities for LDC-led DER procurements	<b>←</b> Support	Work with OEB as lead to identify DER valuation roles and explore opportunities for LDC-led DER procurements
Explore opportunities to enable LDC recovery of DER investment across LDC boundaries	◆ Inform →	<ul> <li>Enable broader DER eligibility in IESO procurements/programs</li> <li>Consider DER in bulk planning</li> </ul>
Ensure local and regional planning considers DER deployment	← Inform → Support	<ul><li>Consider DER in bulk planning</li><li>Support the OEB review of planning process</li></ul>
Continue updates to DER connections process	Support	Provide considerations with respect to IESO assessments and bulk system impacts
Enhance DER data sharing protocols	<ul><li>Inform →</li><li>Support</li></ul>	<ul> <li>Identify opportunities to advance DER data sharing in Ontario</li> <li>Support OEB work to enhance data sharing practices</li> </ul>
Define roadmap for DSO capabilities	Support	Provide input on DSO models and implications for IESO procurement, planning and operations
Drive grid modernization	◆ Support	Work with OEB and Ministry on grid modernization
Enhanced guidance on LDC incentives for using DERs as NWSs	N/A	
	N/A	Review Grid Innovation Fund governance and future funding for DER integration



## Thank You

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