

NOVEMBER 23, 2022

OEB-IESO Joint Engagement on DER Integration

November 2022 Update

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Agenda

1. Recap of Joint Engagement Sessions and Joint Targeted Call
2. Discuss upcoming joint OEB-IESO research on cross-cutting issue #1 (15 min)
3. Update on the OEB's recent Distributed Energy Resource (DER) activities (30 min)
4. Update on IESO's recent DER Roadmap activities (30 min)
5. Update on IESO's Regional Planning Non-Wires Alternatives (15 min)

Recap of the OEB/IESO Joint Engagement

- In response to stakeholder feedback on the need for greater and more visible coordination between the IESO and OEB in relation to DER integration, both organizations are hosting this public forum
- Stakeholders and staff from both organizations have identified a list of crosscutting issues that would benefit from enhanced coordination
- Joint Engagement (JE) sessions take place approximately every six months, alternately hosted by the IESO and OEB, and leverage existing forums where possible (e.g., IESO's DER Roadmap engagement sessions and OEB's Framework for Energy Innovation (FEI) consultation)

Recap of the OEB/IESO Joint Engagement - Objectives

- Provide clarity to stakeholders on what topics and issues are being addressed by each organization and in what forums
- Identify key cross-cutting issues and demonstrate to stakeholders how and when they will be addressed
- Ensure IESO and OEB efforts are appropriately coordinated in order to make timely progress on each organization's efforts and DER integration as a whole

Recap of OEB/IESO Goals for DER Integration

IESO

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

OEB

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

Update: OEB/IESO Placemat

- An updated OEB/IESO placemat for Initiatives Related to Distributed Energy Resources can be found on the [engagement webpage](#) under the November 23, 2022 engagement activities.

Update: IESO-OEB 2021 Joint Targeted Call

The IESO and OEB collaborated on a Joint Targeted Call (JTC) supporting innovative projects that test the ability of DERs to provide services at both the distribution and wholesale levels.

High level objectives of the JTC:

1. Demonstrate the extent to which DERs can defer or eliminate the need for traditional electricity infrastructure and lead to ratepayer cost savings
2. Test the dependability of DERs/DERAs to provide grid services
3. Test new activities and business models related to DERs

Update: IESO-OEB 2021 Joint Targeted Call

Topics to be tested by Joint Targeted Call projects:

- Aggregations of DERs acting as dispatchable resources for transmission and distribution systems
- Assessment of 'value stack' potential of DERs
- Transmission-distribution coordination and communication protocols
- Potential for DERs to be used to defer or avoid system upgrades

- **7** successful pilot projects announced
- **5** projects receiving regulatory guidance
- **\$17.2M** IESO contribution
- **\$56.4M** total project value

Update: IESO-OEB 2021 Joint Targeted Call

- Projects are working to complete first milestones, including activities such as market rule design, program design, development of measurement and verification techniques, participant recruitment, software development and asset installation
 - Testing of DERs scheduled between Q2 2023 and Q2 2025
 - OEB and IESO will share lessons learned as they arise
- **7** successful pilot projects announced
 - **5** projects receiving regulatory guidance
 - **\$17.2M** IESO contribution
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Cross-Cutting Issues Recap

- Originally presented at the Oct. 2021 OEB-IESO Joint Engagement session, and updated at the Apr. 2022 session, the identified cross-cutting issues are:
 1. Pricing, programs, & procurements interactions
 2. Evolution of distribution-level activities and services
 3. DER as non-wires alternatives (NWA)
 4. Data and information sharing
 5. Transmission-Distribution (T-D) operations coordination
- At today's session, we will be focusing on the item #1 above to inform forthcoming joint IESO-OEB research

Pricing, Programs, & Procurements (3 P's) Interactions

- Cross-cutting issue: advance the range of financial incentives for DERs towards functioning better collectively
 - producing more economically efficient outcomes
 - enabling greater/easier access to incentives
 - enabling a more complete set of incentives
 - ensuring incentives do not work cross purposes
- Investment in, and operation of, DERs can be incentivized by pricing (e.g., coincident peak pricing, dynamic rates), programs (e.g., Save on Energy) and procurements (e.g., RFP, auctions, markets)

3 P's Interactions – Update on Related Initiatives (1/3)

There are a number of on-going OEB and IESO initiatives that relate to this cross-cutting issue, including:

- IESO's **DER Potential Study** was published in Sep. 2022, where it was noted "There is some misalignment between the mix of DERs identified in the economic potential and the DERs forecasted to be achievable... these findings shed light on circumstances where wholesale price signals and retail price signals neither align with each other nor with the economic value of DERs"
- IESO's **DER Market Vision and Design Project** is developing enhanced participation models for DERs in the IESO-Administered Markets (IAMS)

3 P's Interactions – Update on Related Initiatives (2/3)

- OEB is enabling the implementation of the **Ultra-Low Overnight Price Plan** for residential and small business consumers
 - LDCs may begin offering the ULO price plan to their customers as early as May 1, 2023 with all LDCs expected to offer the price plan by November 1, 2023
- OEB is accepting statements of interest from potential proponents to implement **Dynamic Pricing Pilots for Non-RPP Class B Consumers**
- OEB's **Framework for Energy Innovation** is facilitating the integration and use of DERs (as non-wires alternatives) by distributors

3 P's Interactions – Update on Related Initiatives (3/3)

- The Minister recently amended the 2021-2024 **Conservation and Demand Management (CDM) Framework** directive, increasing the budget to enable the IESO to deliver additional programs
- In Aug. 2022, the Minister sent a letter asking the IESO to work with the Ministry to design a three-year **Interruptible Rate Pilot** targeted towards certain large load customers in order to help reduce demand during peak periods

Proposed Research & Stakeholder Feedback

- In the context of OEB-IESO collaboration in the OEB-IESO Joint Engagement, the two organizations are exploring a joint study on this cross-cutting issue to investigate the collection of DER incentives holistically as well as at their seams

Objectives of Joint Study of DER Incentives

Create a better understanding of how financial incentives for DERs function collectively to ensure that different incentives aren't working to cross purposes and are achieving the most efficient outcomes.

Develop recommendations for improving the efficiency of DER incentives.

Apply learnings to related IESO and OEB programs and policies that are under development.

Proposed Research & Stakeholder Feedback

- To help scope and focus the research, stakeholder feedback is invited on:
 - Would this type of research be valuable to the sector/stakeholders?
 - Do you agree with the objectives presented in the previous slide? Would you propose any additional objectives?
 - What research questions do you suggest the OEB and IESO should pursue?
 - What DER incentives (e.g. price, program, procurement approaches) do you think work well? Are there specific circumstances under which they work well? What incentives do not work well?
- Finally, was today's session useful? How can we improve the next session?

Proposed Research & Stakeholder Feedback

- At the next OEB-IESO Joint Engagement session we expect to share:
 - how feedback was considered in scoping the study
 - summary of the research questions that will be investigated
- Please use the feedback form found on the DER Roadmap webpage to provide feedback and send to engagement@ieso.ca by **December 14, 2022** with the subject line: "OEB-IESO Joint Engagement feedback".

Thank You

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