

# Stakeholder Feedback and OEB-IESO Response

## OEB-IESO Joint Engagement on DER Integration – November 23, 2022

Following the November 23, 2022, OEB-IESO Joint Engagement session, the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO) received feedback from participants on the joint engagement in general, as well as the updates to the list of cross-cutting issues presented.

The IESO received feedback from:

- [Convergent Energy and Power](#)
- [Electricity Distributors Association \(EDA\)](#)
- [Energy Storage Canada](#)
- [Hydro One](#)
- [Power Workers Union](#)
- [Toronto Hydro](#)

The presentation materials and stakeholder feedback submissions have been posted on the [DER Roadmap webpage](#). Please reference the material for specific feedback as the below information provides excerpts and/or a summary only.

### Notes on Feedback Summary

The IESO appreciates the feedback received from stakeholders. The IESO has provided a summary below, which outlines specific feedback or questions for which an IESO response was required at this time.

## OEB-IESO Joint Engagement

Would the Joint Study of DER Incentives research be valuable to the sector/stakeholders?

Feedback	OEB-IESO Response
<p>Several stakeholders have expressed their opinions on a proposed joint research study on incentives for DERs ("Joint Study"). Some agreed the study would be valuable in understanding the incentives that are appropriate for DERs. While others noted the study is unnecessary and that efforts should be directed towards ongoing and collaborative solution-oriented work and implementation. There was consensus that the study should have a focus on implementation, not just analysis.</p>	<p>Thank you for this feedback. The IESO and OEB are actively working on various DER-related initiatives, some of which were covered at the November 23 Joint Engagement session by each respective organization.</p> <p>For example, the IESO is launching a residential smart thermostat demand response program this year, capturing the high-value potential revealed through the IESO's DER Potential Study. The IESO's Energy Efficiency team is also evaluating the cost-effectiveness of other DERs for consideration in other CDM programs. Additionally, the IESO is currently working to introduce wholesale level participation opportunities for DERs by 2026 through its DER Market Vision Project.</p> <p>The OEB's Report, <a href="#">Framework for Energy Innovation: Setting a Path Forward for DER Integration</a> (Report on FEI) sets out the OEB's expectation of distributors in relation to demonstrating consideration of using third-party DERs as non-wires alternatives (NWAs) to meet distribution system needs. The OEB has issued Filing Guidelines for Incentives for Electricity Distributors to Use Third-Party DERs and NWAs to encourage the use of third-party DERs where they are cost-effective and provide value to customers. This will add to the landscape of DER incentives and compensation for DERs in Ontario.</p> <p>The Joint Study will complement the ongoing efforts of both organizations and contribute towards a more holistic and shared understanding of DER incentives. This understanding can then inform future DER-related IESO and OEB initiatives. Both organizations will continue to evaluate and implement actions to facilitate the efficient integration of DERs in Ontario.</p>

Feedback	OEB-IESO Response
<p>Stakeholders ask that the Joint Study consider:</p> <ol style="list-style-type: none"> <li>1. Already known revenue streams and costs associated with DER operations</li> <li>2. A review of factors that disincentivize DER investment</li> <li>3. Government and LDC-driven incentives</li> <li>4. Review regulatory frameworks, and</li> <li>5. Assess the cost-effectiveness of incentives</li> </ol>	<p>Thank you for this feedback. Listed items 1, 2, 3 and 5 are expected to be taken into consideration in the Joint Study. With respect to item 4, the Joint Study will consider all DER incentives in Ontario, including those for regulated LDCs and customer incentives through regulated delivery rates and the Regulated Price Plan.</p>

Do you agree with the objectives presented on the Joint Study of DER Incentives? Would you propose any additional objectives?

Feedback	OEB-IESO Response
<p>A stakeholder suggested that Objective #1 should be framed in terms of creating a better understanding of revenue streams for DER investments rather than incentives.</p> <p>As well, it was noted that it is possible for there to be an overlap between the actions required to avoid charges/rates and the actions needed to fulfill physical commitments and earn revenues in programs/markets. This can create a situation where customers may have to prioritize one objective over the other, potentially working at cross purposes. Global Adjustment (GA) charges were mentioned as relevant to this issue.</p> <p>Objective #2 was found to be unclear by one stakeholder. The OEB and IESO were asked to specify what they consider as an "efficient DER incentive" and focus on identifying rate structures and programs that efficiently justify the economics of DER investments.</p>	<p>Regarding Objective #1, the study will consider incentives broadly, including those that provide revenues (e.g., through the IESO Capacity Auction) and those that help consumers avoid costs (e.g., bill savings from avoiding peak consumption). In all cases, these incentives will have an impact on a participant's economics of installing and operating DERs.</p> <p>Regarding actions to avoid rates/charges and earn revenues in programs/markets having potential to work at cross-purposes - thank you for this feedback, the issue will be explored in the Joint Study.</p> <p>As a clarification regarding Objective #2 and the reference to "efficient DER incentives," the intention was to point to incentives that are economically efficient. When it comes to DER incentives, an economically efficient incentive would be one that facilitates the deployment of DERs in a way that maximizes their benefits while minimizing their costs, both for individual customers and the energy system.</p>

Feedback	OEB-IESO Response
<p>Stakeholders have suggested that the objectives of the Joint Study need further clarification. Examples of objectives that were suggested include removing barriers to DER deployment, reducing costs for customers, and providing recommendations for changes to rates, regulations, market rules, and programs that will enable DERs to capture value that is proportional to the benefits they provide.</p>	<p>Thank you for this feedback. The OEB and IESO will discuss the objectives at the May 2023 OEB-IESO Joint Engagement session to ensure that they are clear and meet expectations.</p> <p>Regarding the objectives for the Joint Study provided in the November stakeholder materials, the OEB and IESO welcome any additional feedback or suggestions from stakeholders to ensure that the Joint Study is as effective as possible.</p>
<p>Another stakeholder suggested additions to the objectives of the Joint Study:</p> <p>Objective 1: Create a better understanding of how financial incentives for DERs function <i>individually and collectively, including the supporting regulatory frameworks</i>, to ensure that different incentives aren't working at cross purposes and are achieving the most efficient outcomes <i>for energy customers</i>.</p> <p>Objective 3: Apply learnings to related IESO and OEB programs and policies that are under development, <i>as well as to inform future LDC-driven DER programs/incentives</i>.</p> <p>The stakeholder also suggested mapping out the policy landscape related to DERs to identify any gaps and proposed a research question to identify ongoing DER-related policy initiatives and gaps.</p>	<p>With respect to Objective 1, thank you for the suggestion to add "individually". The Joint Study will focus on economics and mechanism design and will restrict its consideration of regulatory issues to the following: DER incentives for regulated LDCs, regulated delivery rates and the Regulated Price Plan. By "efficient outcomes," we mean outcomes that are economically efficient for both individual customers and the broader energy system.</p> <p>Regarding Objective 3, the intention is for the learnings derived from the Joint Study to be applied to IESO and OEB current and future initiatives, including the consideration of DER programs/incentives proposed or offered by LDCs.</p> <p>Existing, considered and future policies that are within the jurisdiction of the OEB and IESO that relate to DER incentives are all within the scope of the Joint Study. This includes the identification of gaps within the existing incentive framework.</p>
<p>A stakeholder proposed adjusting the Joint Study's objectives to include a methodology for assessing the financial benefits of deferring traditional "poles-and-wires investments" resulting from DERs. They suggested quantifying costs associated with accommodating DERs, such as operation costs and potential distribution network asset degradation. The stakeholder also</p>	<p>While the Joint Study will not conduct cost-benefit analysis or deferral value assessment of DERs, the OEB is creating a Benefit-Cost Analysis (BCA) Framework to support distributor proposals to use DERs as NWA's. The Joint Study will consider the OEB's development of the BCA Framework and how it interacts within the broader DER incentive framework, however the details of the</p>

Feedback	OEB-IESO Response
<p>suggested that the transition to enduring remuneration mechanisms for DERs and LDCs should be considered in the Joint Study.</p>	<p>implementation of the BCA Framework will not be in scope for the Joint Study.</p> <p>The Joint Study will also consider mechanisms to facilitate the economic deployment and operation of DERs by customers and DER providers/aggregators.</p>
<p>A stakeholder suggested that Time of Use (TOU) rates should be used to incentivize productive DER adoption, as they may be more effective and low-cost compared to market-based procurement solutions and cited the OEB's Ultra-Low Overnight Price Plan and dynamic pricing pilots as examples of such incentives.</p> <p>The stakeholder also submitted the following recommendations:</p> <ol style="list-style-type: none"> <li>1. Focus on behind-the-meter DER and demand-side management solutions.</li> <li>2. Consider net integrated benefits of existing and planned rate plan.</li> <li>3. Use rate plan assessment findings to consider additional rate plan approaches.</li> <li>4. Ensure regional planning informs IESO's procurement programs.</li> <li>5. Assess the need for further wholesale market incentives.</li> </ol>	<p>Two goals of the Joint Study are to explore ways to provide a more comprehensive set of incentives for DERs and to ensure that these incentives do not conflict with one another. To that end, the Joint Study will consider a wide range of DER incentive types, including delivery and commodity rates that result in charges avoided by behind-the-meter DERs (including behavioural price response), as well as revenues earned through participation in programs and markets, such as ancillary services.</p>

What research questions do you suggest the OEB and IESO should pursue under the Joint Study of DER Incentives?

Feedback	OEB-IESO Response
<p>One stakeholder suggested prioritizing customer benefits, regional needs, and financial impacts when developing research questions for the Joint Study.</p> <p>It was suggested that questions should focus on incentive structures that encourage participation, accessible revenue streams, customer cost and value, and methods for valuing DERs. The Joint Study should also examine past programs and</p>	<p>The Joint Study will focus on the economics of DER incentives from both a system perspective (to determine appropriate uses of financial resources and appropriate cost recovery in the advancement of DERs that benefit the electricity system) and from a participant perspective (to determine whether the incentives lead to optimal installation and operations of DERs). The benefits of addressing local and regional electricity system needs will be acknowledged in this study's</p>

Feedback	OEB-IESO Response
<p>determine if incentives should have been modified and if a goal for DER penetration was established.</p> <p>Another stakeholder recommended documenting all DER incentives and mapping them to specific elements of the DER value stack to identify incentive gaps and instances of incentives working at cross or complementary purposes.</p>	<p>development of a conceptual framework for DER incentives.</p> <p>The study will not cover methodologies for valuing DERs. However, the OEB is planning to develop a Benefit-Cost Analysis (BCA) Framework for DER solutions.</p> <p>The Joint Study is expected to review past, current and planned DER incentives against the relative value provided by DERs (i.e., the “value stack”) and further identify gaps and instances where incentives may work at cross purposes.</p>

In the context of the Joint Study of DER Incentives, 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?

Feedback	OEB-IESO Response
<p>A stakeholder emphasized that the stability of incentives for DERs is crucial, as predictability is needed to encourage investment in DERs. The stakeholder also noted that changes to incentives driven by external forces introduce risks.</p> <p>Another stakeholder highlighted that simplicity is a key success factor for programs used to provide DER incentives, as increased complexity may result in higher costs, ultimately lowering the ROI and reducing the appeal of DER opportunities.</p> <p>Procurements to incentivize DER investment can be effective but need certainty, lead time, education, and the participants often require support from third parties to manage more complex operational requirements.</p> <p>A stakeholder mentioned that the Utility Incentives Subgroup within the Framework for Energy Innovation (FEI) consultation outlined</p>	<p>Thank you for this feedback. The OEB and IESO acknowledge that simplicity, stability and certainty are important considerations to include in the Joint Study.</p> <p>The Joint Study will consider the results of the OEB’s FEI Report and subsequent activities within the context of the broader framework of DER incentives.</p> <p>In the context of the Joint Study, the term “incentive” is a general term intended to capture factors that impact the financial decisions for customers or DER providers/aggregators to deploy and operate DER.</p>

<b>Feedback</b>	<b>OEB-IESO Response</b>
several potential incentives for distributors to adopt DERs for distribution purposes.	
<p>A stakeholder suggested including these elements in the Joint Study:</p> <ul style="list-style-type: none"> <li>- Wholesale energy and ancillary service prices</li> <li>- IESO procurements and programs</li> <li>- Global Adjustment cost allocation</li> <li>- RPP pricing and pilots</li> <li>- DER development and connection costs</li> <li>- Ongoing connection charges</li> <li>- Government regulation and incentives</li> <li>- LDC-specific NWA initiatives</li> </ul>	Thank you for this feedback. The Joint Study will consider, where possible, these recommendations in the analysis.
It was requested that a list of identified DER incentives be shared for stakeholder feedback to enable more informed comments on the completeness and effectiveness of the incentives.	Thank you for this feedback. The OEB and IESO intend to share more information about the Joint Study for stakeholder feedback at the May 26, OEB-IESO Joint Engagement session.
A stakeholder noted that past DER incentives have failed to consider locational opportunities and constraints on the distribution system. The value of DERs to the distribution system varies considerably depending on their location, ranging from positive where there is NWA opportunities to negative when there is capital investment required to increase hosting capacity. Incorporating locational value into DER incentives is essential for improving economic efficiency.	The Joint Study will consider the merits of DER incentives to address locational opportunities and constraints in the distribution system.

Finally, was today's session useful? How can we improve the next session?

<b>Feedback</b>	<b>OEB-IESO Response</b>
<p>Stakeholders agreed that the session was useful.</p> <p>A stakeholder expressed interest in how issue #2 "Evolution of distribution-level activities and services" will be addressed in future OEB-IESO Joint Engagement sessions. They suggested that identifying the roles and responsibilities of</p>	<p>Thank you for this feedback. We look forward to our continued engagement and discussion on the cross-cutting issues and Joint Study.</p> <p>The OEB and IESO are also interested in learnings and presentations from GIF projects and/or demonstrations.</p>

Feedback	OEB-IESO Response
<p>distributors, including what services they provide, is important for investigating incentives for DERs.</p> <p>Another stakeholder suggested inviting stakeholder presentations on specific topics, sharing learnings from pilot projects, and increasing the frequency of meetings.</p>	<p>With respect to frequency of OEB-IESO Joint Engagement sessions, the OEB and IESO expect to continue to host semi-annual meetings. However, ad-hoc meetings can be arranged on an as needed basis.</p>



## General Comments/Feedback

The feedback submissions included general comments and feedback. These points are included in the table below.

Feedback	OEB-IESO Response
<p>A stakeholder suggested including the OEB's Conservation and Demand Management (CDM) Guidelines in the scope of the Joint Study as it is relevant to DER incentives.</p>	<p>Thank you for this feedback. CDM measures are considered within the definition of incentive mechanisms and are thus in scope for the Joint Study.</p>
<p>The approach to investigating pricing, programs, and procurements for DER incentives in the Joint Study should take a holistic view and focus on the seams between them, rather than considering them by scenario or use case, as suggested in slide 15 of the presentation provided at the November OEB-IESO Joint Engagement session.</p> <p>The proposed Joint Study should consider the coordination of pricing, programs, and procurements to allow the "stacked" value of DER to be realized and to comprehensively capture the costs and benefits of the DER.</p>	<p>Consistent with stakeholder feedback, one of the objectives of the Joint Study is to "Create a better understanding of how financial incentives for DERs function collectively to ensure that different incentives aren't working at cross purposes and are achieving the most efficient outcomes". The Joint Study will also address the stacking of DER incentives.</p>
<p>A stakeholder recommended that the IESO and OEB should look beyond the Ontario market to identify successful DER incentives in other jurisdictions and cited New York's Value of DER (VDER) program as an example of aligning DER incentives with the value of the services they provide.</p>	<p>Thank you for this feedback. The Joint Study is expected to include consideration of select DER incentives from other jurisdictions.</p>
<p>The IESO and OEB were asked by a stakeholder to elaborate on what is meant by "business models" in the high-level objective #3 "test new activities and business models related to DERs" described in the Joint Targeted Call presentation</p>	<p>Business models related to objective #3 may include frameworks that identify services and other activities that a business is able carry out while providing value to ratepayers and/or the electricity system.</p>

Feedback	OEB-IESO Response
<p>at the November 2022 OEB-IESO Joint Engagement session.</p>	
<p>A stakeholder suggested that the OEB goal for DER be edited (provided in italics below) to better reflect the OEB's full mandate and role in the sector:</p> <p><i>"To facilitate DER deployment and integration into LDC planning and operations to maximize the value of DERs to the distribution system as well as facilitate customer and adoption of DERs for their own benefit"</i></p>	<p>Through the FEI consultation, the OEB sought to clarify the regulatory treatment of third-party owned DERs and facilitate their adoption in ways that enhance value for consumers. The OEB's Report on FEI sets out the OEB's expectations and next steps in this area. To support the cost-effective provision of distribution service that provides long-term value to customers, the FEI Report sets expectations that distributors should factor DER integration, consistent with the pace of DER adoption, into their planning and operations, as well as consider DER solutions (i.e., NWAs) when assessing options for meeting system needs. The FEI Report also confirmed next steps in providing tools to support distributors in this endeavour (e.g., BCA Framework and incentives for adopting NWAs).</p>