

# Stakeholder Feedback and OEB/IESO Response

## OEB-IESO Joint Engagement on DER Integration – May 26, 2023

Following the May 26, 2023, OEB-IESO Joint Engagement session, the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO) received feedback from the following participants:

- [Electricity Distributors Association](#)
- [Energy Storage Canada](#)
- [Hydro One](#)
- [Pollution Probe](#)

The presentation materials and stakeholder feedback submissions have been posted on the IESO's [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 and OEB thank stakeholders for their input and appreciates the thoughtfulness of the feedback. The IESO and OEB have provided a summary below, which outlines specific feedback or questions for which a response was required at this time.

## OEB/IESO Joint Engagement

Are there additional potential cross-cutting issues related to DER integration that should be considered for collaboration between the OEB and the IESO? If so, do you have suggestions on how these issues could be addressed at future sessions?

Feedback	OEB-IESO Response
<p>The OEB and IESO should continue to coordinate their respective distributed energy resources (DER) initiatives to ensure efficient outcomes and they do not work at cross purposes. Such efforts could include:</p> <ul style="list-style-type: none"> <li>• Development of a workplan with deliverables and scheduled updates for the cross-cutting issues, as necessary.</li> <li>• Identification of which issues can be addressed in tandem.</li> </ul>	<p>We recognize the importance of coordination between the OEB and IESO in our DER initiatives.</p> <p>The OEB’s <a href="#">Energy Transition Project Hub</a> and the IESO’s <a href="#">DER Roadmap</a> set out our respective organizations’ initiatives supporting DER integration. The roadmaps act as a “one-stop shop” for recent updates on our DER initiatives, including scheduled deliverables.</p> <p>As part of the OEB/IESO Joint Engagement on DER Integration, the two organizations will continue to identify cross-cutting issues, discuss coordination of IESO and OEB efforts, and provide clarity on the initiatives undertaken by each organization and in what forums. We will also continue to explore opportunities to ensure our respective initiatives do not work at cross purposes, including considering the development of workplans to address the cross-cutting issues, as well as how such issues may be addressed in tandem.</p> <p>Additionally, the Joint Study of DER Incentives 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 and help ensure they do not work at cross purposes. Both organizations will continue to evaluate and implement actions to facilitate the efficient integration of DERs in Ontario.</p>
<p>The list of cross-cutting issues should also consider the following topics:</p> <ul style="list-style-type: none"> <li>• Assessing outcomes of non-wires alternative (NWA) pilots to inform future integration initiatives.</li> <li>• Developing partnerships with distributors to explore the implementation of the Total Distribution System Operator (T-DSO) model, ensure clarity</li> </ul>	<p>With respect to pilots, the OEB/IESO Joint Targeted Call (JTC) is a key area where we are collaborating with DER project proponents and partners, including distributors. The JTC supports innovative projects that will test the ability of DERs – and DER aggregators (DERAs) – to provide services at both the wholesale and distribution levels, including DERs/DERAs acting as NWAs to defer or avoid the need for traditional infrastructure.</p> <p>As part of the November 2023 OEB/IESO Joint Engagement session, we are hosting a panel discussion on JTC pilot and demonstration projects and providing a brief update on the activities of the TDWG. IESO and TDWG members have also</p>

Feedback	OEB-IESO Response
<p>of what related work will be undertaken through the Transmission-Distribution Working Group (TDWG) and what will need to be undertaken outside of the TDWG.</p>	<p>collaboratively developed clear statements of work for what will be addressed within the TDWG by the end of 2024.</p> <p>Furthermore, at the <a href="#">OEB's Policy Day</a> on October 12, 2023, stakeholders provided feedback on critical regulatory issues that need to be considered in the development of Distribution System Operator models. This feedback is being considered as the OEB develops its 2024-2027 Business Plan.</p>
<p>Pricing, program and procurement interactions (3Ps) should consider delivery cost rate design since DERs are responsive to such costs.</p>	<p>The Joint Study of DER Incentives will include analysis and recommendations on the efficient pricing of electricity, including distribution and transmission charges. This Study is expected to be released by March 2024. The OEB and IESO are also planning to host a stakeholder meeting to present results of the study, targeted for May 2024.</p>

Given the scope of work, are there any specific initiatives or concerns that should receive focused attention?

Feedback	OEB-IESO Response
<p>The OEB and IESO should continue to explore opportunities to work closely with distributors to maximize the value that DERs can provide to the electricity system and enhance their overall value to energy consumers.</p>	<p>Both the OEB and IESO are actively collaborating with electricity distributors on a range of DER-related initiatives, many of which will be highlighted during our November 2023 OEB/IESO Joint Engagement Session (e.g., the Regional Planning Process Review, TDWG, and OEB/IESO JTC projects focused on DER integration). We recognize the pivotal role of distributors and the distribution system in integrating DERs into the electricity system and will continue to explore collaboration opportunities to help maximize the value that DERs can provide to consumers and the electricity system.</p>
<p>The OEB and IESO should move forward with planning and regulatory initiatives that would enable streamlined distributor adoption of NAWs.</p>	<p>The OEB's <a href="#">Innovation Handbook</a> summarizes OEB policies and related materials that have supported innovative projects and proposals, including deploying NAWs to meet distribution needs.</p> <p>The OEB is also undertaking initiatives to further enable the adoption of NAWs. The <a href="#">Report on the Framework for Energy Innovation</a> (FEI) announced the following initiatives:</p> <ul style="list-style-type: none"> <li>• Development of a benefit-cost analysis (BCA) framework to support consistent evaluation of the</li> </ul>

Feedback	OEB-IESO Response
	<p>potential of DER solutions, including NWAs, for meeting distribution system needs.</p> <ul style="list-style-type: none"> <li>• An invitation for distributor proposals for incentives to use third-party DERs as NWAs to test their effectiveness at leveling the playing field with traditional poles and wires solutions, as well as securing DER benefits.</li> <li>• Conversion of the Conservation and Demand Management (CDM) Guidelines into Consolidated Guidance on NWAs, which will set out new guidance, requirements and processes for contracting with DER solution providers.</li> </ul> <p>The OEB’s <a href="#">Report to the Electrification and Energy Transition Panel</a> (EETP) also provided advice on how the OEB could be granted additional authority to allow recovery of distributor investments that benefit consumers at the broader distribution level, thereby improving the business case for NWA adoption. We look forward to reviewing the EETP’s recommendations to government later this year.</p> <p>The IESO is also supporting NWA adoption by helping develop bulk system values for the OEB’s BCA Framework through its Integrated Regional Resource Planning process.</p>
<p>Consideration should be given to whether an evolution in the role of the distributor is needed to effectively integrate and maximize the benefit of DERs. This could include consideration of whether Distribution System Operator (DSO) models can help optimize DER value, as well as ensure resource procurement (e.g., NWAs) and distributor operation of such resources do not work at cross-purposes to the IESO-Administered Market.</p>	<p>The OEB is undertaking steps to consider how distributor roles may need to evolve to effectively integrate DERs. For instance, the <a href="#">OEB Report on FEI</a> affirmed the OEB’s expectations that distributors should factor DER integration into system planning and consider NWAs in meeting system needs. The <a href="#">OEB’s Report to the EETP</a> also provided advice on different ways the OEB could examine the issue of electricity distributors taking on new activities to support the energy transition. The OEB also recently received stakeholder feedback on DSO models during Policy Day 2023.</p> <p>Additionally, the IESO’s TDWG is developing operational coordination protocols for the IESO and distributors, owners and aggregators of DERs. These protocols will detail the actions to be taken and information to be shared by the parties, ensuring the effective and reliable operation of DERs and the electricity system as they participate in the wholesale</p>

Feedback	OEB-IESO Response
	market and as DERs may provide services to the distribution system as NWAs.

## General Comments/Feedback on Joint Initiatives

The feedback submissions included general comments and feedback on OEB and IESO DER activities. These points are included in the table below.

Feedback	OEB-IESO Response
<p>To maximize transparency of stakeholder input in the Joint Engagement, the OEB and IESO should establish a dedicated website/webpage to house related documents and links to relevant policy initiatives.</p>	<p>Currently, all Joint Engagement materials are hosted on the <a href="#">IESO's DER Roadmap engagement page</a>, which also provides links to project pages for IESO initiatives supporting DER Integration. For instance, the Joint Study of DER Incentives has a dedicated <a href="#">project page</a>.</p> <p>The OEB's <a href="#">Energy Transition Project Hub</a> similarly provides links to project pages for OEB initiatives supporting DER integration.</p>
<p>The IESO's Grid Innovation Fund and OEB Innovation Sandbox are excellent resources to support pilot projects seeking how to derive value from DERs for the local electricity systems. Distributors and project proponents could benefit from greater sharing of outcomes and lessons from these projects, including the rationale for not approving funding for projects.</p>	<p>As part of the November 2023 OEB/IESO Joint Engagement Session, we are hosting a panel discussion on JTC funded pilot and demonstration projects. Insights from the JTC will continue to be shared through other channels as well, including public reports and conference presentations. Insights will also inform OEB/IESO staff's approach to future initiatives supporting DER integration.</p> <p>The call for proposals was very competitive, with several high-quality submissions received. As funding for this call was limited, it was not possible to fund every project. Projects that were not approved have received feedback on why they were not approved and an opportunity to debrief with the JTC team.</p>
<p>The OEB should consider undertaking a holistic review of electricity distributor rate design to establish appropriate price signals for customers to adopt DERs, including storage.</p>	<p>The Joint Study of DER Incentives considers distribution and transmission charges, among other incentives that DERs are exposed to. The study is intended to contribute towards a more holistic and shared understanding of DER incentives.</p>

Feedback	OEB-IESO Response
<p>The Joint Study should consider an evaluation of multiple variations of the electricity markets. This could be achieved through transparent tracking mechanisms to quantify the DER incentives and monitor growth through classification, then produce the best solution for each variation of DERs.</p>	<p>The quantitative evaluation in the Joint Study of DER Incentives will primarily focus on existing Ontario pricing, procurements and programs. The results of the quantitative evaluation, along with jurisdictional scans and best practices, will be used to provide directional recommendations in the study on how to improve Ontario’s DER incentive framework.</p>
<p>The OEB and IESO should consider undertaking a broader jurisdictional scan of varying market structures, including European markets that have experience with DSO models.</p>	<p>Jurisdictions with experience with DSO models is not in scope of the Joint Study. However, the TDWG will undertake a comprehensive jurisdictional review of existing DSO models to inform the development of Transmission-Distribution (T-D) coordination protocols.</p>
<p>The OEB and IESO should engage distributors to leverage their customer relationships and knowledge of distribution system needs to accurately identify DER value streams across many layers of the electricity system, including flexibility, reliability and ability to contribute to supply.</p>	<p>Previous Joint Engagement Sessions have solicited stakeholder feedback on the Joint Study, and the November 2023 Joint Engagement will provide another opportunity to submit feedback. The OEB and IESO also intend to facilitate a stakeholder session in Spring 2024 to collect feedback on the Final Report and next steps.</p> <p>Additionally, both the OEB and IESO are actively collaborating with electricity distributors on a range of DER-related initiatives, many of which will be highlighted during our November 2023 OEB/IESO Joint Engagement webinar. We recognize the pivotal role of distributors and the distribution system in integrating DERs into the electricity system and will continue to explore opportunities to collaborate with distributors.</p>
<p>Recommendations for a DER incentive framework should leverage insights gleaned from pilots that have been executed in the markets today.</p>	<p>The Joint Study of DER Incentives includes consideration of incentive-related concepts that are being piloted as part of the OEB/IESO Joint Targeted Call and other pilot projects. Please note that while the pilots are focused on exploring implementation and test the ability of DERs and DER aggregations to provide grid services, the Joint Study of DER Incentives is focused on economics and incentive design</p>

Feedback	OEB-IESO Response
	<p>considerations to provide recommendations on how existing and planned incentives can function more efficiently together.</p>
<p>The conceptual framework must consider the operational and technical specifications of transmission and distribution systems to help determine how distributors can help enable DER solutions that comply with those specifications. The framework must also maximize their value to customers and the electricity system.</p>	<p>Consideration of technical and operational issues related to the transmission and distribution systems are out of scope of the Joint Study of DER Incentives, which is focused on economics and incentive design considerations.</p>
<p>The study should clarify how incentives promote DER adoption in alignment with the needs of the bulk and local distribution systems. Specifically, how incentives will encourage:</p> <ul style="list-style-type: none"> <li>• connections where there is the capacity to connect;</li> <li>• optimal siting where load demand is best supplied through DERs;</li> <li>• local grid benefits; and,</li> <li>• DERs that do not pose a risk of customer dissatisfaction (e.g., by reducing reliability or power quality).</li> </ul>	<p>The Joint Study of DER Incentives will consider alignment of incentives with bulk, regional and distribution needs, including incentives that encourage DERs sited in areas that provide value to the electricity system. However, topics related to connection availability and power quality are not in the study's scope. These topics relate to other DER-focused initiatives, such as the OEB's DER Connections Review. The OEB's Reliability and Power Quality Review will also establish a mechanism to better understand the impact of DERs on system reliability and prevent them from posing a risk to customer satisfaction.</p>
<p>The Joint Study should discourage, wherever possible, incentives that are technology-specific (e.g., connection cost subsidies for renewable generators that are not available to storage facilities).</p>	<p>The Joint Study of DER Incentives takes a technology-agnostic approach to the evaluation of DER incentives, focusing on value streams and comparable compensation for those value streams regardless of resource type.</p>

<b>Feedback</b>	<b>OEB-IESO Response</b>
<p>The study should clarify how it will overlap or integrate with the OEB’s forthcoming BCA framework for DERs.</p>	<p>The Joint Study will not conduct a cost-benefit analysis of DERs. The study will include an analysis of how the OEB’s BCA Framework, which is still under development, may interact within the broader DER incentive framework.</p>
<p>The application of the “beneficiary pays” principle to Conservation and Demand Management (CDM) programs is a key step in remunerating distributors for designing and delivering programs based on both distribution and bulk system benefits, as applicable.</p>	<p>The IESO-Distributor CDM Working Group is considering how to apply the “beneficiary pays” principle as it considers potential pathways for electricity distributors to access distribution rate funding for distributor-led CDM programming.</p>
<p>The TDWG should prioritize supporting an expedited development of protocols and address the regulatory barriers to enable the Total-DSO model in the market.</p>	<p>The IESO’s TDWG is committed to developing implementation-ready protocols for the Total DSO coordination model (as well as the Dual Participation model) by the end of 2024. The scope of the TDWG is limited to the development of implementation-ready operational coordination protocols and assessment of the flexibility to adapt coordination if the environment evolves.</p>