

**Distribution System Operator Capabilities
EB-2025-0060**

**LIEN Comments in Response to Questions in the May 20, 2025, OEB letter Regarding
Stakeholder Consultation**

The OEB letter to stakeholders of May 20, 2025, regarding EB-2025-0060 provides a set of discussion questions to inform the OEB's development of a robust Distribution System Operator (DSO) framework. At the June 24th consultation, the OEB indicated its interest in receiving broader responses than specifically required to these questions. The Low-Income Energy Network ("LIEN") has prepared responses below to these discussion questions in the order in which they appear in the May 20th letter, and where appropriate added broader comment.

Defining Opportunities and Objectives

○ **What are your views on the opportunity and policy objectives for DSO capabilities?**

The OEB has defined DSO as an entity with advanced capabilities to integrate, manage, and optimize DERs for distribution and wholesale electricity markets services. The OEB has indicated that the purpose of this DSO consultation is to inform the development of a regulatory framework to maximize DER value and opportunities, while ensuring that the pace and scope remains aligned with consumer interests and system needs.

LIEN supports this purpose. Increased DERs on the electricity grid unlock the opportunity to provide non-wires solutions (NWS - distribution-connected generation, storage and controllable loads) that increase customer choice, have environmental benefits and are more cost-effective than traditional 'wires and poles' solutions.

To achieve this purpose, the DER market in Ontario requires a more developed regulatory framework, and until such time as this framework is in place, this lack of development creates regulatory uncertainty which adds increased risks to consumers, and in particular, low-income electricity consumers. These consumers are least able to absorb any short-or medium-term increases to residential electricity prices that may be required to address any upfront or other costs to add DERs to the electricity grid. As well, this increased risk means that each LDC's prioritization and pacing of DER investment on their distribution grid needs to match what the LDC's customers can absorb without undue rate impacts, and in particular, with enhanced sensitivity to the LDC's most vulnerable customers, their low-income customers. It is critical that cost allocation be done so that low-income and other residential customers pay only for the costs they are responsible for.

While the DER market and regulatory framework is maturing, the OEB should consider raising the subsidy of participants of the Ontario Electricity Support Program ("OESP")

to effectively address any residential electricity price increases that an LDC will incur related to the identification, evaluation, and adoption of DERs on their distribution grid.

- **What are your views on the use cases and value of DSO capabilities for Ontario, including the importance of DSO capabilities in capturing more of the benefits DERs can provide?**

Enabling the implementation of DSO capabilities is very important to capturing more of the benefits DERs can provide. As the OEB points out, there are at least 3 main benefits of DSO capabilities: increased facilitation of DERs as NWSs, increased DER hosting capacity, and expanded DER compensation mechanisms to increase cost-effective DERs on the grid. Key DSO functions LDCs provide today include distribution planning and network development, distribution network operations, and distribution connections provision. Some LDCs are offering or have offered program and market development and operations either through programs or pilots. All of these functions are important to creating and implementing a sustainable and effective DER market in Ontario, which will provide greater customer choice, and more cost-effective and environmentally beneficial non-wire solutions to wires and poles solutions. LDCs being able to choose an optimal mix of wires and non-wires solutions for the management of their distribution grids will enable LDCs to better provide reliable, resilient, least-cost and environmentally sustainable distribution services to their customers.

Distributors are responsible for their distribution grid and their customers and have the line of sight on distribution system operations. The IESO does not have this line of sight as its mandate is the bulk electricity system grid. With enhanced communication between the IESO and LDCs on the management of the electricity grid, each can provide more optimal services to Ontario's electricity consumers.

LIEN supports the development of the DSO framework to achieve expedited development of DERs for non-wires solutions, congestion management, and operational efficiency use cases. These are critical use cases for LDCs to develop and implement to enhance the reliability, resiliency, cost-effectiveness, environmental sustainability, and affordability of their distribution grids.

- **How should the OEB's objectives (as set out in section 1 of the OEB Act) be balanced and reflected in the development of a DSO policy framework for Ontario?**

The OEB objectives in the OEB Act include:

“1. To inform consumers and protect their interests with respect to prices and the adequacy, reliability and quality of electricity service.

1.1 REPEALED: 2019, c. 6, Sched. 2, s. 1.

2. To promote economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and demand management of electricity and to facilitate the maintenance of a financially viable electricity industry.
3. To promote electricity conservation and demand management in a manner consistent with the policies of the Government of Ontario, including having regard to the consumer's economic circumstances.
4. To facilitate innovation in the electricity sector.”

All four objectives must be taken into account in the development of a DSO framework for Ontario. Objectives one and two listed above should be given more weight as they are the ones that are designed to ensure cost-effective and efficient development and management of the electricity grid while protecting the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service. These objectives are most important because they provide guidance for the prioritizing and pacing of investment in the design and implementation of the DSO framework in a manner that protects consumers. It will be critical to protect the interests of consumers least able to cope with any price increases, such as low-income electricity consumers, due to DSO development. These two OEB objectives give the OEB the mandate and the responsibility to protect those low-income consumer interests.

Promotion of conservation and demand management as NWSs enhances consumer choice and offers cost-effective environmental benefits to all electricity consumers. Innovation in the electricity sector regarding DSO development is key to a successful DSO framework, helping to remove barriers to DER adoption and creating opportunities for more DER implementation. As a result, objectives three and four must be given significant weight in the development of the DSO framework.

Evaluating Proposals and Approaches

- **Is an evolutionary approach to developing DSO capabilities appropriate for Ontario to pursue in order to achieve the policy objectives set out in the Staff Discussion Paper?**

An evolutionary approach to developing DSO capabilities is appropriate in order to achieve the policy objectives for the development of the DSO framework. The evolutionary approach should involve setting a mandatory baseline of development for all LDCs but also must provide flexibility for supporting the innovation needed and enable certain LDCs to expedite DSO development in particular areas. Ontario's LDCs differ in size, technical capabilities, system characteristics, growth rates and constraints, with some facing considerable pressures now that need to be addressed. These differences in LDC needs should be addressed in the evolution of DSO capabilities.

Several LDCs expressed the critical need for enhanced communication between the IESO and the LDCs, not only for data sharing but also for having greater visibility on each other's grids. The current approach of not knowing when the IESO will activate DERs on the LDC's distribution grid, distributors not being able to access IESO DR program participants' thermostats (e.g. Peak Perks) for timely demand response on the distribution grid, and the need for better coordination between distributor peak demand and IESO peak demand, results in suboptimal use of DERs on the bulk and distribution grids. Providing enhanced communications and interoperability should be a priority.

LIEN supports the creation of a working group to further develop this evolutionary approach, with making enhanced communication between LDCs and the IESO and appropriate pacing of DSO development which protects consumers, particularly low-income electricity consumers, a priority. The initial focus of the working group should be on developing the framework - policies, guidelines, any code changes - around legally permissible activities of LDCs today. This includes mechanisms to put NWSs on a more level playing field with wires solutions, such that compensatory mechanisms overcome bias of favouring wires over non-wires solutions.

The OEB instituted incentive mechanisms for natural gas utilities in order to remove bias in favour of pipe solutions. The incentive mechanisms were designed to remove this bias of natural gas corporate leaders, while avoiding undue rate impacts. The OEB should put similarly effective compensatory/incentive mechanisms in place to remove any bias distribution grid corporate leaders may have in favour of wires solutions, thus placing non-wires and wires solutions on a level playing field.

- **What are your views on each of the three proposals presented in the Staff Discussion Paper?**

Proposal 1: Require distributors to assess the need for DSO capabilities to be implemented to address system needs

Proposal 1 involves the OEB requiring all distributors to conduct two mandatory assessments to inform preparations to integrate DERs and their aggregators effectively to meet system needs when cost-effective to do so. The two assessments include an assessment of:

1. Current and future needs to identify DSO use cases (such as non-wires solution, congestion management, and operational efficiency) applicable to its service area, and
2. Current capabilities to identify what capabilities the distributor needs to develop and when, including requisite grid modernization investments, to support identified use cases.

LIEN supports requiring LDCs to carry out these assessments and report the results to the OEB in a timely manner. This work will support LDCs that do not require DSO capabilities immediately as well as those that do. Establishing a working group to set out the specific requirements for these assessments, including screening criteria, indicators and other techniques

is appropriate. LIEN recognizes that many LDCs are well along their way in carrying out such assessments. To avoid unnecessary delay in developing further the regulatory framework for DSOs, LDCs should conduct and report on this work in parallel with other work they will need to carry out regarding Proposal 2 and 3.

Proposal 2: Develop a Simplified DSO Model

LIEN supports the development of an interim DSO model that provides a mandatory baseline for all LDCs on DSO development and also provides opportunities within the existing legal framework for other LDCs which are further along the DSO development curve to continue to move forward more quickly toward optimizing the addition and management of DERs on their distribution grids.

The interim model would place increased emphasis on non-wires solutions and DER programs and provide enhanced policies and guidelines to place these on a level playing field with wires opportunities and solutions. The interim model also must accommodate effectively the immediate needs expressed by LDCs at the stakeholder meeting, while also ensuring protection of their distribution customers, especially their low-income customers, from improperly paced development and rate impacts. The OEB should consider allowing these LDCs to offer enhanced rate subsidies for their customers on the OESP to better manage rate impacts where expedited investment in DSO development is warranted.

As part of the work for Proposal 2 which should be done in parallel and in collaboration with the work in Proposal 1, the working group should seek consensus on the objectives of the interim model and advanced model for DSO, and in developing the requirements for Proposal 1 and 2, address the treatment of any conflicting objectives or objectives that might result in less than an optimal path toward the advanced model.

Proposal 3: Further Development of Advanced Models

The Advanced Model should be aspirational and be the desired outcomes of a mature DSO model in Ontario. It should flow from both the baseline features and the advanced features of the interim model that the more DSO-advanced LDCs have been implementing. The OEB Discussion Paper in Section 5.2.3 poses questions for stakeholders to examine as part of Proposal 3. These are a starting point. The working group should review, refine and expand upon these questions as necessary as part of the development of the objectives, work plan and schedule for each of the three proposals.

Balancing Standardization and Flexibility

- **How should the OEB best balance the benefits of a standard approach relative to the innovation and insights that could be gleaned from enabling greater flexibility and diversity through experimentation?**

The OEB can best balance the benefits of a standard approach by setting a mandatory baseline for DSO development for all LDCs, while facilitating opportunities within the existing legal framework for other LDCs which are further along in DSO development to move forward more quickly toward optimizing DERs on their distribution grids. This involves the OEB facilitating increased emphasis on non-wires solutions and DER programs, underpinned by enhanced policies and guidelines which place DERs on a level playing field with wires opportunities and solutions.

It is critical that this OEB balancing addresses effectively the immediate needs some LDCs are facing with increased pressures to accommodate greater growth and loads on their distribution grids, while addressing grid constraints in those growth areas. At minimum, this involves the OEB facilitating the development of enhanced communications between the IESO and the LDCs, including interoperability between the LDCs and the IESO. This should go beyond information sharing so that distribution grid and the bulk grid operations are better optimized.

This balancing may involve greater investments in distribution grids by LDCs, which in the short- and medium-term will likely put increased pressure on rates. It will be important for the OEB to ensure appropriate prioritization, pacing and cost allocation of these investments, and in particular address the rate impacts of the most vulnerable consumers, the low-income electricity consumers.

While the DER market and regulatory framework is maturing, the OEB should raise the subsidy provided to low-income electricity consumers on the OESP to effectively address any residential electricity price increases that an LDC will incur related to the identification, evaluation, and adoption of DERs on their distribution grid.