

ONTARIO ENERGY ASSOCIATION

Distribution System Operator (DSO) Consultation (EB-2025-0060)

Date: July 22, 2025

To shape our energy future for a stronger Ontario.



Ontario Energy Association

ABOUT

The Ontario Energy Association (OEA) is the credible and trusted voice of the energy sector. We earn our reputation by being an integral and influential part of energy policy development and decision making in Ontario. We represent Ontario's energy leaders that span the full diversity of the energy industry.

OEA takes a grassroots approach to policy development by combining thorough evidence based research with executive interviews and member polling. This unique approach ensures our policies are not only grounded in rigorous research, but represent the views of the majority of our members. This sound policy foundation allows us to advocate directly with government decision makers to tackle issues of strategic importance to our members.

Together, we are working to build a stronger energy future for Ontario.

The Ontario Energy Association (OEA) appreciates this opportunity to provide comprehensive feedback to the Ontario Energy Board (OEB) regarding the critical Distribution System Operator (DSO) Capabilities Consultation (EB-2025-0060). As the credible and trusted voice of the energy sector, the OEA is committed to fostering an energy future for Ontario that is both robust and innovative. Our members have engaged in extensive discussions to synthesize perspectives and formulate recommendations that support an efficient, reliable, and equitable evolution of Ontario's distribution system. This submission addresses the OEB's key questions, drawing on our collective expertise and strategic insights from our working groups, with the aim of contributing to a well-defined and pragmatic DSO policy framework for Ontario.

Responses to OEB Consultation Questions

1. What are your views on the opportunity and policy objectives for DSO capabilities?

The OEA emphasizes that the journey towards Distribution System Operator (DSO) capabilities is already underway in Ontario, building upon foundational OEB policies such as the Regulated Price Plan (RPP) with smart metering and initiatives related to Non-Wires Solutions (NWS) and Distributed Energy Resources (DERs) connections. The development of DSO capabilities represents a critical opportunity to meet Ontario's rapidly expanding energy demands and leverage the full potential of DERs to cost-effectively address system needs, rather than solely focusing on bulk system expansion. This evolution offers significant benefits to customers, including reduced electricity costs, enhanced grid reliability, and greater participation opportunities.

First and foremost, the OEB's early policy objectives should center on establishing the enabling regulatory framework for LDCs to embrace the Market Facilitator DSO role, rather than focusing on prescribing the regulatory needs for mature DSO functionality. This means the OEB has a vital role in providing clear guidance, potentially through license conditions and investment frameworks, to foster confidence in local markets and facilitate the development of these essential capabilities, building upon the competencies the sector has already showcased.

Market facilitation, optimizing grid utilization, ensuring cost-effectiveness for ratepayers, and maintaining system reliability and safety are not benefits exclusive to a fully mature DSO; rather, they are core functions and priorities that should be central throughout the DSO journey. These benefits can begin to accrue as foundational DSO capabilities are developed and deployed. Jurisdictions globally are expanding DSO capabilities to meet system needs, demonstrating the potential for DERs to cost-effectively reduce the burden of bulk system expansion and provide customers with options to contribute to system needs and offset energy costs.

2. 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?

DSO capabilities are paramount to capturing the full benefits of DERs, which will increasingly be important to manage local distribution needs affordably. The OEA's DSO Study found that

DSOs provide customer benefits, with larger benefits identified for the Market-Facilitator model. Key use cases for Ontario include optimized hosting capacity, localized congestion management, voltage support, and the provision of grid services from DERs, all of which contribute to a demonstrable reduction in electricity costs for customers and improved electric system reliability and performance.

The OEA's analysis consistently finds that the Market-Facilitator DSO model delivers the greatest net benefits for Ontario's grid and customers. To ensure neutrality, avoid conflicts of interest, and clarify accountability, the "market facilitator" role must be clearly and narrowly defined—focusing on core functions and intended outcomes rather than institutional form.

Key responsibilities of a DSO acting as a neutral market facilitator include:

- **Coordinating and Enabling DER Participation:** Manage the coordination, optimization, and dispatch of Distributed Energy Resources (DERs) for the benefit of local and bulk systems, while enabling their integration into IESO-Administered Markets without limiting their commercial independence.
- **Acting as a Single Point of Contact and Market Enabler for DERs:** Serve as the primary interface for DER dispatch into local and wholesale markets, manage the distribution network, and facilitate open, non-discriminatory access to grid and market services for all participants.
- **Ensuring Transparency and System Value:** Provide clear, accessible information on network and market conditions, and take responsibility for maximizing the value DERs provide across the distribution, transmission, and bulk supply layers.

Traditionally, electricity grid planning has been largely "top-down," meaning planning has primarily originated from centralized generation and transmission assets, with power flowing in one direction to consumers. In contrast, "bottom-up" planning starts at the local distribution level, considering the specific characteristics, needs, and opportunities presented by distributed energy resources (DERs) and evolving customer demands. A "bottom-up" approach is crucial for accurately valuing and optimizing DER integration, enabling cost-effective investments tailored to specific local needs. It significantly enhances grid management, reliability, and allows for proactive handling of dynamic conditions, particularly in scenarios with high DER penetration and electrification.

3. 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?

As a reminder, Section 1 of the OEB Act asks the OEB to balance the following objectives:

1. Protect consumer interests with respect to price, reliability, adequacy, and quality.
2. Promote economic efficiency and cost-effectiveness while maintaining a financially viable sector.
3. Promote electricity conservation and demand management in a manner consistent with the policies of the Government of Ontario.
4. Facilitate innovation.

Leading jurisdictions worldwide are implementing DSO capabilities precisely because they effectively deliver on the objectives outlined above. They leverage the existing grid to provide cost-effective customer benefits and enable customer participation in meeting system needs. They enhance reliability, adequacy, and quality. They promote efficiency and cost-

effectiveness. They promote conservation and demand management by enabling DERs to service a currently unavailable value proposition.

With this in mind, the OEB's early objectives should focus on enabling the development of DSO capabilities in a manner that will best benefit customers in Ontario in the long term. This means the OEB should focus on working collaboratively with LDCs, DER aggregators, DER providers, and interested customers in its early work on this issue, actively incorporating their feedback, particularly during the development of the DSO roadmap, which is the primary deliverable from this engagement. Failure to fully engage the sector in the development of this roadmap risks compromising its future effectiveness and ability to be successfully executed. As has been done in Norway, for example, the regulator has worked closely with stakeholders to facilitate the building of capability and learning with the sector as service offerings and market opportunities are tested and optimized to meet the unique circumstances of their particular system. The understanding gained by the OEB through active participation in the development phase will better inform its future actions when it comes to considering any necessary regulatory actions to protect customers, provide proper incentives, and ensure the financial viability of DSO activities.

The OEA recommends that the OEB's early efforts focus on establishing an enabling regulatory framework that assigns clear roles and provides essential early guidance to instill confidence in the developing DSO landscape for LDCs. The Government of Ontario's ambitious agenda for the sector has already manifested in extensive OEB consultation initiatives, which often draw upon the same valuable resources among interested stakeholders. It is critical that the OEB actively track the interconnectedness of its various consultation initiatives, ensuring that sector resources remain optimally focused on capability development for a sophisticated DSO model. The OEB should clearly articulate how it is overseeing this holistic picture, thereby ensuring the sector's ability to effectively achieve the Minister's mandate without diverting resources from crucial development and learning phases necessary for a mature DSO service.

4. 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?

The OEA maintains that policy should not follow a phased implementation as proposed in the OEB's Staff Discussion Paper (i.e., Proposal 2 before moving to Proposal 3). Instead, the OEB should provide clear policy and assign the Market-Facilitator (MF) DSO role, in alignment with Proposal 3, to enable utilities to evolve towards that end goal.

The OEA supports a phased implementation approach for the utilities to establish these advanced DSO capabilities. This strategy is a pragmatic pathway, allowing for adaptive learning and integrating best practices from international jurisdictions where advanced DSO models have matured over several years. The OEB should establish a clear roadmap for this phased utility implementation, defining the ultimate end-state vision for the advanced model, key milestones, and a structured path forward.

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

The OEA's view on the three proposals can be summarized as follows:

- **Proposal 1 (Require distributors to assess the need for DSO capabilities):** The OEA emphasizes that significant work has already been done on the need for DSO capabilities. The focus should shift to defining the core technical capabilities essential for a functional DSO in Ontario. Given the complexity of the issue, a long-term framework—or "advanced model"—is essential to give the sector confidence to make major investments without the risk of stranded assets. It also helps avoid fragmented efforts and reduces the likelihood of higher long-term costs.
- **Proposal 2 (Develop a simplified DSO Model):** The OEA rejects Proposal 2. Creating a "simplified" DSO model risks understating complexity, limiting opportunities, and inadvertently locking the province into a model that provides minimal benefits. The concept of "simple" here is an inadvisable concept; models perceived to be simple can in fact carry the same, if not more, technical and coordination requirements as the Market Facilitator model. Moreover, these approaches often create higher risks for the distribution system and can result in a poorer experience for DER proponents (who may face curtailment), potentially leading to customer confusion. Instead, the focus should be on defining the minimum technical requirements necessary for an advanced DSO.
- **Proposal 3 (Further Development of Advanced Models):** The OEA supports Proposal 3 as it best reflects the utilities' role as DSO and the ongoing evolution, supported by customers, as well as OEB and government policies. The OEB should establish a clear roadmap for DSO implementation, defining the end-state vision, key milestones, and a structured path forward. A sector-led working group should be formed to co-develop the DSO model, drawing on precedents like the UK's ENA Open Networks initiative. This approach will help align expectations, avoid duplication, and ensure a coherent, scalable path to DSO implementation.

6. 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?

To ensure consistency and meaningful outcomes, and to effectively balance standardization with innovation, the OEB should seek submissions from stakeholders on the roadmap for DSO development, ensuring it benefits from the collective expertise and diverse insights of the sector. This inclusive approach will foster a shared understanding and ownership of the pathway forward. The OEB should leverage the foundational technical work already completed by sector-led initiatives, such as the Transmission Distribution Working Group (TDWG). While a functional DSO requires core capabilities, particularly in planning and operations, that must be in place for any model to be viable, a phased roadmap—developed through broad stakeholder input—can help guide implementation. The OEB should defer structural regulatory changes until operational needs and lessons are better understood, focusing first on building DSO functionality.

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Let's unravel complex energy challenges, together.