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Our File: EB20250060

Attn: Ritchie Murray, Acting Registrar

Dear Mr. Murray,

Re: EB-2025-0060 – Distribution System Operator Consultation – SEC Comments

We are counsel to the School Energy Coalition ("SEC"). These are SEC's comments on the development of the Distribution System Operation (DSO") framework, informed by the OEB Staff Discussion Paper ("Discussion Paper")[1], the DNV Energy Insights Report ("DNV Report"), and the June Stakeholder Symposium.

Defining Opportunities and Objectives

The ability of the distribution system to cost-effectively integrate, manage, and optimize Distributed Energy Resources ("DERs") for services is best achieved through an entity that procures and operates the system with the required expertise and capabilities, and that undertakes distribution planning without bias toward traditional infrastructure. A DSO, which may take different forms, has the potential to achieve some, or all, of these objectives.

Any development of DSO capabilities in Ontario must be focused on delivering benefits to customers. If implemented properly and at an appropriate pace, DSOs can support cost-effective grid management by enabling competitive procurement of local third-party non-wires solutions, reducing reliance on what is often costly traditional infrastructure. DSOs can also increase system capacity to host DERs, which may allow individual customers to reduce their energy costs and, in many cases, create broader system benefits.

If implemented poorly or too quickly, DSOs risk increasing costs without delivering meaningful value. This concern is especially relevant now, when DER penetration as a non-wires alternative remains limited. There is a risk of significant upfront costs with benefits that may take years to materialize.

Poorly designed frameworks also risk providing unfair advantages to distributor shareholders, particularly by limiting competition and innovation from third-party providers. Moreover, DSOs may be

[1] OEB Discussion Paper: Distribution System Operator Capabilities, May 2025 ["Discussion Paper"]

susceptible to market power concerns where DER procurement is constrained to a narrow geographic area. Robust oversight, transparency, and structural protections are needed to ensure DSOs deliver value to customers.

Ensuring that the DSO framework remains focused on customer needs and benefits is consistent with the OEB's statutory objectives under section 1(1) of the *Ontario Energy Board Act* ("*OEB Act*"), including the requirement that rates, which will ultimately fund any DSO-related costs, are just and reasonable. It is also consistent with the OEB's objective to promote innovation, both in how distributors operate and how customers are able to meet their energy needs.[2]

The Discussion Paper identifies six guiding principles: customer benefit, need, cost-effectiveness, flexibility, practicality, and adaptability. These should not be treated as a simple list.[3] The first three should apply universally. The latter three should guide how these principles are implemented across Ontario's 57 electricity distributors, recognizing differences in size, service territory, and DER penetration.

Evaluating Proposals and Approaches

SEC supports the approach outlined in the Discussion Paper, which appropriately balances the need to enable DSO capabilities at a pace that aligns the realization of benefits with the associated costs. SEC supports the proposal to require distributors to assess the need for DSO capabilities to address system needs. Specifically, distributors should assess current and future needs to identify use cases, determine current capabilities, and evaluate what will need to be developed to meet those use cases.[4]

The proposal to develop specific requirements for this assessment and to classify information in a standardized manner is critical to ensuring success. This will not only allow for comparability across distributors, but will also help ensure that the information is presented in a way that gives customers and the OEB confidence that it reflects actual needs rather than simply distributors' preferences.

At the Stakeholder Symposium, the message from a number of distributors could be characterized as different shades of "build it (DSOs) and they will come (DERs)." SEC accepts that certain capabilities must be in place before the value of DERs can be fully unlocked. However, it would be problematic to adopt this view in its extreme form, as some distributors appeared to suggest, namely that full or significant DSO capabilities must be implemented upfront.

First, SEC believes the speed of DER adoption will vary across the province, depending on numerous factors, many of which are outside the control of the OEB or government energy policy, such as local customer need and value.

Second, there is a significant risk of wasted investment if distributors deploy new DSO capabilities that later become obsolete or require replacement before their benefits materialize.

Third, imposing these costs on customers without delivering commensurate value will create upward pressure on distribution rates. This issue is concerning on its own, but it may also create a perverse

[2] Filing Requirements for Electricity Distribution Rate Applications - 2025 Edition for 2026 Rate Applications, Chapter 2, p.14
[3] Discussion Paper, p.49-50
[4] Discussion Paper, p.51

incentive for customers who invest in DERs to use them solely for cost avoidance, rather than participating in the programs or markets the DSO is intended to support for broader system benefit.

One area where SEC believes the OEB should go further is in requiring standard estimated costs for the future capabilities identified through the assessment. During the Stakeholder Symposium, it appeared that this type of exercise had been undertaken as part of the IESO Transmission-Distribution Coordination Working Group functional assessment work. This is critical, as it allows for an objective evaluation of the costs distributors would incur to enhance their DSO capabilities. Without cost information, it is difficult to assess the value of the future benefits. This work should be integrated with other ongoing OEB initiatives related to DERs, such as the development of the BCA and the forthcoming work on the system value of DERs.[5]

With respect to Proposals 2 and 3, there was significant discussion at the Stakeholder Symposium about whether the OEB should proceed with a simplified DSO model or instead move directly to more advanced models.

Some of the largest distributors warned that a simplified model may not adequately address key issues, such as interoperability and communication between the IESO and electricity distributors. Their view was that there is no such thing as a truly simplified DSO model, and that the OEB should instead focus on tackling the inherently complex issues from the outset. SEC does not take a position on all of the technical details raised, but agrees that it is important to resolve key policy and technical questions early. Otherwise, the OEB risks pursuing a simplified model that could lead to suboptimal outcomes and sunk costs.

At the same time, this concern may reflect a misunderstanding of what the OEB intends by a simplified model. SEC believes a more appropriate approach would be to establish a baseline model that distributors could adopt. This model would include minimum requirements and capabilities, as well as rules governing participation in programs and market-based procurement of DER services. For the largest distributors, these would likely be activities they are already undertaking or planning to undertake. For medium and small distributors, this could serve as a 'DSO-in-a-box' approach, providing them with a clear set of expectations and standards they can apply in the interim while more advanced models are developed. SEC believes this would be a reasonable and effective path forward.

Balancing Standardization and Flexibility

SEC believes the balance between standardization and flexibility will need to be considered as part of the OEB's work outlined in Proposal 3, which involves the further development of advanced DSO models. Ultimately, the OEB will need to determine the appropriate future model, including the level of separation between DSO and distribution network operator (DNO) activities. However, it is premature to make such decisions before the OEB has undertaken and reviewed the standardized assessment it proposes.

While there appeared to be consensus among the distributors who presented at the Stakeholder Symposium in support of the Market Facilitator model, it was also evident that they had not considered some important components, such as the need for true functional separation between DSO and DNO components. Functional separation means that those involved in DSO procurement operate within a group that is separate from all other distributor functions. It requires that DSO activities, including

[5] Integrated Energy Plan Implementation Directive to OEB, section 11

system planning, are entirely independent from the rest of the distributor's operations. This separation necessitates distinct reporting structures, as well as information and data sharing protocols, to ensure full separation between the DSO and DNO. Legal separation is the gold standard for ensuring separation between functions, but we recognize that it carries significant practical, regulatory, and cost implications. All of this will need to be considered in detail.

Other Matters

There are a number of other issues that may not have been included in the Discussion Paper, but warrant a specific focus in the development of any DSO Framework and further action by the OEB both in the short and longer term.

Focus on Setting Rules Ensuring Fair and Non-Discriminatory Treatment. The OEB must prioritize the establishment of rules that ensure the fair and non-discriminatory treatment of DERs in the context of DSO activities. Whether through programs, rules, or market mechanisms, there is a significant risk that distributors will favor DERs owned by their affiliates. This could occur directly through procurement processes or indirectly through the sharing of system and planning information, allowing affiliates to install DERs in locations that offer greater opportunities. The result is higher costs for customers in the short term and a weakened competitive landscape that undermines long-term cost savings.

An increasing number of distributors have affiliates already in the business of installing DERs either for themselves or on behalf of third parties.[6] This trend can only be expected to grow, particularly as the value of DERs increases and customers are able to monetize their DER by providing services to the distribution grid.[7]

SEC submits that the OEB's Affiliate Relationships Code ("ARC") was never designed for a system with DSOs and should be updated, or its principles applied in a more tailored and exacting manner to reflect the new realities of DSO operations.

Market Power Safeguards. A number of Non-Wires Solutions ("NWS") projects will involve distributors procuring third-party services as a tool to meet peak demand. These flexibility services are likely to deliver some of the most significant system cost savings and are procured either upfront through an auction process to set capacity payments (for example, the IESO York Region NWA Demonstration Project), or separately, or in combination, through a near real-time market (for example, Essex Powerlines' PowerShare pilot Shortflex product).

While these market mechanisms offer the opportunity to procure DERs at the lowest cost through competition, they carry a high risk of concentration and market power abuse.

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[6] For example, Alectra's affiliate, Alectra Energy Solutions, offers a service of constructing and operating BTM DER solutions as an energy-as-a-service model. Similarly, Hydro One's affiliate AUX Energy provides similar BTM BESS DERs solution to customers. Another of Alectra's affiliates, Alectra Convergent Development LP, owns and operates a BESS facilities as market participants.

[7] For example, while SEC understands this part of the project may not have gone ahead, in the Powerlines PowerShare DSO pilot project, Essex Energy Corporation, an affiliate of Essex Powerlines Corporation, had initially planned to "design, procure, and install a 1 MW solar and 1 MW battery storage unit at the Pollution Control Plant located in Leamington, Ontario," and to be an "active participant in the pilot market." (See EB-2024-0096, JT 1.14, Attachment Appendix B, GIF Contribution Agreement, Schedule C, 2021 Joint Targeted Call Project Proposal, section 1.7L)

Unlike the wholesale level, the geographic scope of available DERs at the distribution level is much smaller. For example, a flexibility service may target customers with DERs served by a single station or even a single feeder. This narrow scope can allow a single DER provider to exert undue influence on prices and raise them to unreasonable levels. The IESO has a range of market power mitigation tools in its real-time market design and competitive procurement processes to prevent this. Similar protections, such as offer and bid caps along with other tools depending on the specific market mechanism, will need to be implemented at the distribution level to ensure fair competition and avoid market power risks.

Distributors may not be equipped to design or apply these protections, and detecting abuse may be difficult. The OEB must ensure that market power mitigation is a core element of both simplified and advanced DSO models. Without it, customers will face higher short-term costs, and the long-term viability of a robust competitive DER market capable of reducing system costs will be undermined.

Cost Allocation. As discussed above, the OEB must ensure that the pace at which distributors acquire DSO capabilities is matched by corresponding benefits to customers. One area that puts distributors and their customers at a disadvantage is that assessment is the current allocation of costs, which does not align with the distribution of benefits. A program or market at the distribution level that reduces peak demand in part of the distribution system often provides benefits to the bulk system in both the short and long term. This is because the coincident peaks of a distributor and the bulk system are often aligned. Over the long term, reducing a distributor's peak demand reduces, at a minimum, the transmission capacity that must be provided to serve that distributor.

The problem is that while these benefits accrue to the bulk system and, therefore, to most or all provincial customers, the costs are borne entirely by the distributor and, indirectly, its customers.

SEC believes the OEB should recommend to the Ministry of Energy and Mines that amendments to the *OEB Act* are needed to address this unfairness and establish a mechanism for the fair allocation of costs. We note that in other contexts, similar beneficiary-pays principles are already recognized. For example, under section 79.1 of the OEB Act and Ontario Regulation 333/09, the OEB currently splits the recovery of certain costs of connection facilities for qualifying generation facilities between a distributor's own customers and customers across the province, based on a calculation of direct benefits. Similarly, the IESO and distributors are advancing a proposal to address this issue in the context of funding for eDSM programs that provide both distribution-level and bulk system benefits (Local DSM Stream 2).

Oversight, Transparency and Learnings. As DSO capabilities enable distributors to create local energy markets to address system needs, and building on SEC's concern regarding fair and non-discriminatory competition and the potential for the exercise of market power by certain DER participants, the OEB must enhance its capacity to monitor these new markets. SEC believes the OEB should assign this responsibility to the Market Surveillance Panel ("MSP"). The MSP, supported by OEB Staff as needed, has the expertise to provide oversight by monitoring and reporting on local distribution flexibility markets. While the MSP was originally established to monitor the wholesale market, the OEB has the authority through amendment to its By-Law No. 2[8] to expand its mandate accordingly.

[8] See OEB By-Law #2

SEC further believes the OEB should establish a set of minimum transparency requirements for any DSO local market auction results. Similar to the IESO capacity auction, and other wholesale market activities, procurement results should be made public. This includes the number of bidders, names of successful participants, the capacity procured, and clearing prices. Where applicable, information about any clearing prices and volumes from real-time or near-real-time flexibility market operations should also be disclosed. Transparency is important for building confidence in local markets, both for participants and distribution customers.

SEC also believes that, since distributors are still in the early stages of developing DSO capabilities and operating local non-wires solutions programs and markets, public sharing of lessons learned is critical to their success. This is particularly important because these programs are funded by ratepayers. While distributors may share learnings informally with each other through various forums, that information is rarely made public in a structured way. The entire sector should benefit from the experiences of distributors that undertake these programs. One model for this is the IESO's reporting requirements under the Grid Innovation Fund[9], which the OEB has recently required for a DSO pilot project funded through rates to be made public.[10] Those milestone reports provide useful information to the sector, including the OEB, about the challenges faced by the specific pilot. As these programs begin to move beyond the pilot stage, the lessons learned will continue to be important for the broader success of DSO implementation.

Summary

These are still the very early days of distributors developing and implementing DSO capabilities. The OEB must ensure that any framework moves at the right pace, focuses on delivering clear benefits to customers, and includes the necessary oversight and protections to support fair competition and long-term success.

Yours very truly,
Shepherd Rubenstein P.C.

Mark Rubenstein

cc: Brian McKay, SEC (by email)

[9] See for example, GIF Milestone Report, Milestone 2, Part for DSO Pilot Project (PowerShare)
[10] *Decision and Order* (EB-2024-0096/0022), August 29, 2024, p.14-15