Feedback Form

Local Generation Program – April 23, 2025

Feedback Provided by:

Name: Richard Carlson

Title: Director, Energy

Organization: Pollution Probe

Existing contract number (if applicable): Click or tap here to enter text.

Email: [redacted]

Date: May 9, 2025

Following the April 23, 2025 webinar to provide information on the Local Generation Program (LGP) and the high-level design of the program, the IESO is seeking feedback on the high-level design of the recontracting stream of the LGP

The referenced presentation and supporting materials can be found under the April 23, 2025 entry on the Local Generation Program webpage.

To promote transparency, feedback submitted will be posted on the Updates to IESO Monitoring Requirements: Phasor Data engagement page unless otherwise requested by the sender. If you wish to provide confidential feedback, please mark "Yes" below:

☐ **Yes – there is confidential information, do not post**

X **No – comfortable to publish to the IESO web page**

Please provide feedback by May 9, 2025 to engagement@ieso.ca. Please use subject: *Feedback: Local Generation Program*.

Specific Questions for Existing Facilities / Suppliers:

General Comments/Feedback

Pollution Probe commends the Government of Ontario and the IESO for initiating the Local Generation Program, for setting out clear timelines, and for inviting stakeholder comments on program design. We believe the Local Generation Program, if properly designed and implemented, will be a significant contribution to meeting the growth challenges facing Ontario's electric power system in an economically and socially responsible way. This submission lays out a series of recommendations on how to ensure the success of the Local Generation Program.

Background on the current recommendations from Pollution Probe

Pollution Probe recently completed an extensive consultation and design process addressing many of the same challenges as the Local Generation Program (LGP). Although the research, consultation and final recommendations covered a wider range of electric power system issues in Ontario, many of the findings and recommendations focused on local generation. Pollution Probe and many others believe that local resources, including generation, storage and demand management, when appropriately deployed, are central to addressing key priorities, assuring ratepayers and citizens that:

1. Incremental load growth is served by the most economic and appropriate resources available. (Local resources respond effectively to both price signals and local conditions, and have shorter planning timelines, reducing the likelihood of over-investment or under-investment.)
2. The economic development benefits of new energy investment are concentrated in the communities being served and kept largely within Ontario.
3. The benefits of careful and incremental adoption of new and innovative technology are realized as early as possible in Ontario.
4. The most effective solutions to environmental requirements are implemented on a timely basis.

In 2024 Pollution Probe led a research and consultation process focused on how to ensure new investment in power system reliability was as efficient as possible while respecting the generally accepted requirements for grid de-carbonization. For the full report, see "**Achieving Reliability in a Future Ontario Power System: An Action Plan**". A full action plan with all the steps are available at the website.

The recommendations and conclusions in this report will likely be very helpful to stakeholders and the IESO as they consider options for the design of Ontario's Local Generation Program.

Key recommendations from the Report pertaining to Local Generation

At a high level, the consultation process and the report put forward the following recommendations pertaining to Local Generation:

1. Clarify the future role of LDCs in Ontario with respect to system operation and reliability
2. Enable the development of local flexibility markets
3. Define and catalogue Ontario's needed reliability services in near-, medium- and long-term time frames, including quantity, required services time, the required response time, and other characteristics.
4. Establish Local Reliability Auctions - regular auctions for capacity to meet local constraints. It could include the ability for either the IESO or the LDC to call upon the resource for outage management or

when dealing with constraints.

These recommendations are admittedly ambitious and will require substantial near-term collaboration between the IESO, industry, policy makers, regulators, and other stakeholders. However, the benefits in terms of achieving a lower cost, more flexible and self-reliant grid, are more important than ever.

Ensuring the Local Generation Program recognizes both local benefits and wider system benefits

Local generation has the potential to solve two kinds of problems at once, local and system-wide. In order to recognize the overall value to the provincial electric power system of additional supply, the underlying formula for setting remuneration should start with a figure that represents long-term avoided costs for new supply at the wholesale level. These costs are significantly higher than the current average cost of power and can be gleaned to a large extent from the results of current long-term RFPs.

In addition to recognizing the long-term value to the system of new supply, remuneration under the LGP should also include amounts reflecting additional local and regional benefits, and possibly dis-benefits where appropriate, defined through a transparent process. Similar to the concept of value-stacking, the IESO and LDCs will need to work together with stakeholders to define relatively simple methods for determining and/or approximating the benefits of new supply projects that collectively or individually meet certain standards of dependability. These benefits should be reflected in additional revenue streams under the LGP representing local and regional benefits.

In addition, as has been discussed in the context of earlier programs, the IESO and affected LDCs will need to regularly publish updated maps indicating where connection capacity exists and identify areas where additional local generation would benefit, or no benefit, either the local or bulk system.

Appendix A: Full Action Plan for net-zero reliability

Action	Central purpose	Short-term actions	Medium to long term	Actors[61]
Bulk system				
1 Define and catalogue bulk-level reliability services needed in Ontario	To prepare as many resources and suppliers as possible to understand what participation in the reliability market may mean for them, and to identify their capability and costs.	Define Ontario's needed reliability services in short-, medium- and long-term time frames in the evolving market, including quantity, characteristics, the ability of different technology types to supply each service and method of acquisition, and update at least annually.		* IESO
	NOTES: *This will build on the IESO's existing practice of publishing Operating Reserve prices / scheduling amounts daily, along with publishing regulation service needs in the Annual Planning Outlook (APO), and the requirements in the Market Rules. Understanding that many reliability services are currently provided through existing market contracts, clarity would be needed on current status of reliability services and future requirements.*			
2 Develop metrics on the state of bulk-system reliability in Ontario	To encourage resources and suppliers to focus their efforts on the most beneficial areas and prepare to enter the market.	Develop clear, effective metrics that communicate the state of Ontario's bulk system reliability and operability, and publish them on a regular basis.		* IESO * LDCs (for distribution assets)
	NOTES: *This recommendation builds on and expands current work being done by the IESO's Operability and Transformation team*			
3 Conduct and publish operability assessments	To build an industry that is ready and capable of focusing on meeting reliability needs as they change.	Conduct and publish detailed near term operability assessments to understand strengths and gaps, building on existing processes already underway at the IESO.	Mandate, conduct and publish more robust assessments of future operability requirements in various timeframes, expanding substantially on what is currently provided as part of the Annual Planning Outlook or similar long term planning product.	* IESO
	NOTES: *These assessments need to include information on what resources are currently providing needed reliability services and support for operability. The data should be sufficient to properly inform market-based investment in the full range of reliability services including those from clean energy resources. For example, past operability assessments examined impact upon reliability of increased quantities of variable energy resources and the impact of increased penetration of DERs. The publication schedule will vary according to the type of assessment, but should be dependable and transparent in terms of process.*			

61 * With input from market participants and stakeholders

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4 Design a transparent procurement process for bulk-level reliability services	To encourage market participants to identify and develop the reliability-related components of their competitive offers.	Design existing procurement contracts, and those for upcoming RFPs (capacity and/or energy) to include requirements for clean energy resources to have the capability to deliver needed reliability services.	Develop Reliability Services Auctions (RSAs), open and transparent bulk power system markets for reliability services from non-emitting resources	* IESO
	Based on information and engagement from Actions 1-3, the IESO should develop Reliability Services Auctions (RSAs) for needed essential reliability services. In the early stages (such as for LT3), essential reliability services can be included in the energy and capacity RFPs but not explicitly procured. For later RFPs (such as LT4 and on), RSAs should be held for essential reliability services in the transmission grid. These can also be coordinated with local RSAs (see below). While the IESO has started work in this area, it now needs to be specifically mandated, expanded, and carried out relatively quickly.			
Distribution System				
5 Set a vision and design a new regulatory regime for local electricity markets and clarify the role of the LDCs	Develop the future business model of the LDC, including scope of operations for the LDC related to providing local and bulk-level reliability services and managing local markets. * Ministry of Energy	Set vision and policies on the future business structure of LDCs and their role in planning, creating and/or operating local markets.	Design a regulatory regime for new business structures that allow local markets.	* OEB * LDCs
	The aim of the new business structure should focus on the following: ▪ Removing the capital expenditure bias of regulated utilities (vs. operating expenditures) ▪ Introducing economically appropriate incentives to develop non-wires solutions ▪ Reward LDCs for the value they provide with benefit sharing with customers as such creating the right financial drivers to unlock value for LDCs and their shareholders ▪ Promoting the better integration of non-emitting resources ▪ Reducing costs for customers. This decision can be based on developments in peer jurisdictions, as well as informed from previous work on the local utility conducted in Ontario and consider such questions as to the "Total DSO" or "Dual Participation" models, as well as consultation and discussion on the future regulatory regime. Policy clarity is urgently needed here as the amount and type of investment in the distribution system is contingent on the business model and regulatory regime.			
6 Develop an open data system for the distribution system	To improve the efficiency of investment and competitive markets by systematically disseminating data useful to market participants.	Develop an open data system to ensure data availability and visibility in the distribution system, which is accessible and shared with market participants		* IESO *OEB * LDCs
	This data should be developed to: **1** Ensure that the local utility can better plan and operate distribution assets and to gain appropriate visibility **2** Quantify the amount and the value of the services needed **3** Ensure that the local utility can publicly provide required information to developers, along with information on the full range of grid services needed, for them to propose solutions. Developing the data system could be placed on the rate base to secure funding.			

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7 Develop local reliability markets	In parallel to the RSA at the bulk level, local RSA are needed to transparently procure reliability services and non-wires solutions.		Develop markets or other transparent procurement mechanisms for technology-neutral RSAs at the distribution level.	* OEB * LDCs
	The size of the market will likely depend on the specific local utilities. These markets could include: ▪ Local Reliability Auctions: This could meet feeder based needs through regular auctions for capacity to meet local constraints. It could include the ability for either the IESO or the LDC to call upon the resource for outage management or when dealing with constraints. ▪ Local Voltage Stability Support: These auctions could provide fast-frequency or stabilization services to resolve voltage issues through non-wires solutions. Such markets could include explicit procurements or contracts with a market operator, or be done through out-of-market payments. Wherever possible the local markets should promote projects that offer multiple benefits, such as reliability as well as infrastructure deferral. To accomplish this, workable rules on remuneration for value stacking in circumstances when a distribution connected asset is able to economically provide energy and reliability services will be needed.			
Bulk and Distribution levels				
8 Improve coordination of reliability services between bulk and distribution systems	To ensure system integrity and maximize internal efficiency.	Define the methods required for coordinating local reliability services with bulk system reliability services and set ambitious targets specifying responsible parties and milestone dates. Initiate real world tests and trials of value stacking models in coordination with the other actions above	Develop enhanced distribution systems, including the use of distribution reliability metrics coordinated with bulk system reliability, commensurate with their increased role in electrification and the energy transition.	* IESO * OEB * LDCs
	Steps would include: (1) Developing a framework and method for categorizing sections of distribution systems as essential, and (2) defining applicable reliability metrics for them.			