Greater Ottawa Electricity Planning Public Webinar #3 – June 9, 2025

Response to feedback received

The IESO hosted a public webinar for the Greater Ottawa Region electricity plan, or Integrated Regional Resource Plan (IRRP) on June 9, 2025. During the webinar, the IESO provided an overview of the regional electricity planning process and status, including the analysis of all screened-in options and draft recommendations. Presentation materials, including the webinar recording and additional information on the non-wires analysis, are available on the Engagement Webpage.

The IESO appreciates the feedback received, which will be considered by the Technical Working Group[1] to develop the IRRP. Feedback was received from the following parties and the full submissions can be viewed on the Engagement Webpage.

- 3G Energy Corp.
- Aaron Kelly
- E. O'Driscoll
- Enbridge Gas Inc.
- Region of Durham

The section below summarizes feedback received related to key developments, projects and initiatives that should be considered in the electricity planning for the Greater Ottawa Region.

[1] The Technical Working Group consists of IESO as the lead, the local transmitter (Hydro One Networks Inc.), and the Local Distribution Companies (LDCs) Hydro One Networks Inc. and Hydro Ottawa Limited.

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Options Analysis and Draft Recommendations

Several pieces of feedback received sought greater transparency or clarification on the calculations used, costs provided, and the analysis of wire and non-wire options.

Feedback / Common Themes	IESO Response
Provide more information on how the land area calculation was conducted, specifically: • 3G Energy Corp shared that the presentation indicated Kanata MTS and South March TS will require approximately 30 MW to meet anticipated winter peak loads. If wind turbines are rated at 5-6 MW each and needs to be separated by 2-3 km of land, then 100 MW of wind would involve 20 wind turbines and with BESS onsite, it should take approximately 5 hectares, not 49,000 hectares. • Aaron Kelly inquired whether vertical Battery Energy Storage Systems were considered in calculating the footprint of BESS facilities.	The IESO appreciates this insight. The Technical Working Group identified significant large-scale needs throughout the Ottawa Area. To support planning for Ottawa, the area was divided into four smaller subsystems. A detailed summary of each subsystem's electricity needs in the near-, medium- and long-term is provided in Webinar 2's Appendix (slides 49 to 56). To enhance transparency, the IESO released additional information on the non-wires analysis, including how it would be scaled annually to meet the forecasted demand and infrastructure needs of the Core East and Kanata-Stittsville subsystems, and welcomes feedback on the additional information shared. The IESO acknowledges the concern regarding the land use number cited for wind facilities, specifically the figure of approximately 49,000 hectares. To clarify, the figure reflects the total land-use requirements of these facilities, not the direct physical footprint of the infrastructure itself. This approach is based on guidance from the National Renewable Energy Laboratory's (NREL) Technical Report on the Land-Use Requirements of Modern Wind Power Plants in the United States. Please note, the analysis has been reduced to 37,000 hectares and was based on the long-term need of 280 MW for the Kanata-Stittsville subsystem. Land requirements for Battery Energy Storage Systems were based on a local battery project under development by Capital Power and do not employ vertical Battery Energy Storage Systems. When analyzing the ability to meet the area's electricity needs and applying industry-standard assumptions about land-use requirements, the Technical Working Group found that the scale of

Feedback / Common Themes	IESO Response
	wind generation required would be too large to fit within city limits.
Additional considerations should be included in the evaluation of non-wire alternatives, specifically: • Aaron Kelly requested more information on how costs were arrived at and if analysis on costs, value streams and benefits associated with building BESS for Core East, with local transmission sited within the greater limits of the City of Ottawa, was analyzed. • Aaron Kelly inquired if the IESO considered local economic benefits of local renewable generation and storage, such as job creation, community ownership and tax revenues to Ottawa residents. • Aaron Kelly shared that siting on rooftops and above parking lots can optimize space utilization. • Aaron Kelly inquired how the IESO is thinking about resiliency in terms of wire solutions, integration of non-wire options and extreme weather.	Thank you for this feedback. To ensure that Ontario's electricity system remains reliable, affordable and sustainable, an evaluation of wire and non-wire options to meet identified needs is a key step. As part of the regional planning process, the IESO screened and evaluated wire and non-wire options including generation and storage, electricity demand-side management (eDSM), and demand response to meet the needs. As part of this work, the Technical Working Group considered reliability, cost, technical feasibility, maximizing the use of the existing electricity system (where economic), and community preferences. The IESO appreciates feedback regarding local economic benefits that local renewable generation and storage can have, including job creation, community ownership and tax revenues. Due to the significant land-use requirements, generation and storage facilities were not recommended to meet the city's needs. The IESO released additional information on the non-wires analysis which includes details on the land-use requirements needed for screened-in generation and storage options in Core East and Kanata-Stittsville, as well as the associated costs. While this may not be the recommendation for transmission needs within Ottawa, generation and storage remain important for meeting broader provincial goals and can support local distribution on a small scale. There is a Local Achievable Potential Study underway which will identify potential for behind-the-meter distributed energy resources (including battery and solar), demand response, and energy efficiency programs. The IESO appreciates the feedback regarding siting considerations. The Local Achievable Potential Study (LAPS) will inform targeted demand-side measures that can be

Feedback / Common Themes	IESO Response
	combined with the recommended infrastructure in the IRRP to address the identified needs. A webinar will take place later this year to share the results of the study. During the IRRP development, the Technical Working Group received feedback to consider resiliency when evaluating options to meet Ottawa's electricity needs. As a result, the Technical Working Group has recommended a new switching station to interconnect Kanata MTS, South March TS and the new 230kV TS (north of Kanata MTS). A switching station improves transmission resilience and reliability by rerouting power during outages or maintenance, minimizing disruptions and enhancing grid flexibility.
Aaron Kelly inquired how the IESO's draft recommendations will work to reverse the trend towards greater carbon emissions and deliver an environmentally sustainable electricity system.	The IESO does not prepare greenhouse gas emissions forecasts at a regional planning level, however, in the past the IESO has prepared emissions forecasts as part of its Annual Planning Outlook (APO). The IESO's Annual Planning Outlook identifies system needs and planned actions from 2025 to 2050 that are needed to ensure the reliability, affordability and sustainability of Ontario's electricity system. With significant progress being made to address these needs, in March 2024 the IESO provided an update of its emissions forecast for the sector. Please see these details here. Updated emissions information is provided in the 2025 Annual Planning Outlook.
E. O'Driscoll shared the draft recommendations seem to address the issues given the unknowns with response to future demand and technology.	The Technical Working Group appreciates this feedback.

Planning Approach

Several feedback received encouraged the IESO to enhance its approach in regional planning by broadening engagement with stakeholders, considering additional solutions and prioritizing environmental sustainability.

Feedback / Common Themes	IESO Response
3G Energy Corp. encouraged the IESO to undertake engagement with stakeholders in the Independent Power Producer (IPP) industry who can implement solutions that local distribution companies do not have knowledge in.	The IESO is committed to helping ensure that interested parties are kept informed and are provided with opportunities for purposeful engagement to contribute to electricity planning initiatives. Throughout the development of Ottawa's Integrated Regional Resource Plan (IRRP), the IESO invited interested parties, to a series of webinars and sought feedback on the regional demand forecast, electricity needs, options analysis, and recommendations including the evaluation of technically feasible and cost-effective solutions. Input and data from all interested parties, including the Independent Power Producer (IPP) industry, was welcomed throughout the development of the IRRP. A detailed summary of engagement and feedback received is provided in section 8 of the IRRP. The IESO encourages all interested parties to subscribe receive updates and share feedback on regional plans and other IESO initiatives of interest.
3G Energy Corp. shared the draft recommendations are based on biased information about the ability of Distributed Energy Resources (DERs) to fill future energy needs.	Thank you for this feedback. The IRRP's recommendations are informed by an evaluation of wire and non-wire options to meet the needs and consider reliability, cost, technical feasibility, maximizing the use of the existing electricity system (where economic), and feedback from communities and other interested parties. For more details regarding the analysis of alternatives, the IESO has developed a guide to the current general approach for evaluating non-wires alternatives (NWAs) during IRRPs. Behind-the-meter options, including Distributed Energy Resources (DERs), are being explored

Feedback / Common Themes	IESO Response
	through the Local Achievable Potential Study. A webinar will be hosted later this year to share the results of the Local Achievable Potential Study and next steps.
Enbridge Gas Inc. inquired if the IESO has or will be evaluating small scale (<10MW) behind-the-meter gas-powered generation to reduce demand on the grid.	Thank you for this feedback. In response to community feedback regarding aligning the Integrated Regional Resource Plan (IRRP) with the City's decarbonization goals, gas-powered facilities were not evaluated.
Enbridge Gas Inc. inquired how policy changes since the development of the demand forecast have been, or will be, incorporated into the IESO's planning.	The IESO recognizes that policy changes may impact timing, pace and volume of developments incorporated into the demand forecast for the Ottawa Area, and encourages municipalities, Indigenous communities and other customers to keep their local distribution company informed on changes to their projected electricity needs. The Technical Working Group meets annually to review forecast projections, impact on system need dates and potentially to trigger regional planning earlier, if needed.

General Feedback

Several feedback received had general electricity inquiries including differences in having two Local Distribution Companies service the region, encouraging the IESO to support innovative solutions, providing feedback on electricity programs and inquiring about broader forecasting information.

Feedback / Common Themes	IESO Response
Consider planning for renewables, specifically: • Aaron Kelly encouraged the IESO to focus on getting solutions out of pilot and into reality at scale. • E. O'Driscoll shared that the community would like to be powered by renewables and stresses the importance of planning for this ahead.	The IESO appreciates this insight. The IESO has had several successes in deploying energy efficiency, distributed energy resources and storage at scale, including: • The launch of Peak Perks, which has over 200,000 participants since the program began in 2023; • Executing Canada's largest ever energy storage procurement; and • The introduction of solar and storage incentives for residential customers across the province through the Home Renovations Savings Program. Customers in Ottawa have received more than $140M in incentives through Save on Energy Programs. This includes programs with active collaboration from Hydro Ottawa such as Bizenergysaver and CoolSaver, which were launched to help system constraints in Ottawa. Additionally, the IESO is continuing to work to accelerate and expand deployment of innovative solutions through programs and initiatives such as the: • Grid Innovation Fund; • Hydrogen Innovation Fund; • Local Generation Program; and • ERP Storage and Co-located Hybrid Integration Project.
3G Energy Corp. shared that Ottawa is not being served well by having two different local distribution companies (LDCs) as there are different concepts for growth, reliability, customer service and profitability.	Thank you for this insight.

Feedback / Common Themes	IESO Response
Aaron Kelly shared the Home Renovations Savings Program prohibits net metering and restricts system size. New home buyers will find they are prohibited from net-metering despite having no agency in the choice of the previous homeowner.	Thank you for providing this feedback. In the directive issued to the IESO by the Minister of Energy and Electrification that authorizes the IESO to invest in these rebate programs, the definition of electricity demand side management (eDSM) excludes those measures incented through a different program or initiative undertaken by the Government of Ontario or the IESO. This means that solar projects installed and incented in the Home Renovation Savings and Retrofit programs are not eligible for net metering agreements at any time. Those contemplating installing solar panels on their home or business can choose to either receive an upfront incentive through the Home Renovation Savings or Retrofit programs, or to participate in a net metering agreement with their local electric utility and receive compensation over time.
The Region of Durham requested the system power-law outage projections for 2045 vs 2025.	Thank you for this feedback. The IESO developed a informational document as a guideline to the types of information and data that are made available during the regional planning process. It describes the general approach used by the IESO to make regional planning information and data available to communities, stakeholders and interested parties during the development and following completion of an Integrated Regional Resource Plan (IRRP) and provides a comprehensive list and descriptions of the information, and the timing in which it is typically made available during an IRRP. This guideline serves to set the baseline for what data and information stakeholders can expect to better enable them to provide informed feedback to the IESO and the Technical Working Group responsible for developing regional plans.