Feedback Received and IESO Response

London Area Public Webinar: Draft Scoping Assessment – April 1, 2025

The IESO shared the draft Scoping Assessment Outcome Report and a narrated video presentation summarizing the planning approach to address the electricity needs of the London Area electrical region. The scoping assessment recommends an Integrated Regional Resource Plan for the London Area. During the presentation, the IESO provided an overview of the regional electricity planning process, the London Area electrical region, and shared the rationale for the draft scoping assessment recommendation for the region. The materials are available on the London Area engagement webpage.

The IESO appreciates the feedback received, which will be considered by the Technical Working Group¹ to develop the IRRP. Feedback was received from the following parties and the full submission can be viewed on the London Area <u>engagement webpage</u>:

- Chippewas of the Thames First Nation
- City of London
- Enbridge Gas Inc.
- Enwave Energy Corp
- EverGreen Energy Corp.
- Moose Power Inc.
- Township of Southwold

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

¹ The Technical Working Group is lead by the IESO, and consists of the LDCs in the region and the local transmitter (Hydro One Networks Inc., Entegrus Powerlines Inc., ERTH Power Inc., London Hydro Inc., Tillsonburg Hydro Inc.).



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Regional Planning Considerations

Several feedback received stressed the importance of ensuring the demand forecast considers growth, development and coordination of electric and gas. Additional information on infrastructure needs and accounting for extreme weather conditions was also requested. Feedback also encouraged exploring non-wire options and engagement with Indigenous communities.

Feedback / Common Themes

The need to address capacity issues in the region and the challenges resulting from them:

- Enwave Energy Corp. inquired about Nelson Transformer Station (TS) and whether the station capacity need identified from the draft scoping report has been addressed by the refurbishment or if there continues to be a medium-term need.
- Moose Power Inc. highlights the short-circuit capacity issue on Buchanan TS and as a result their net-metering Distributed Energy Resource applications have been rejected. They were advised the capacity issue could be alleviated with a neutral grounding reactor at the TS, which would open megawatts of Distributed Energy Resource capacity and are curious if there are plans to address this issue.
- The City of London raised the capacity issue with the Talbot TS preventing Londoners and London businesses from installing solar PV and shared that it is important to ensure the grid supports Distributed Energy Resources to help facilitate climate action. Additionally, they highlight grid infrastructure risks from climate change such as TS exposure to peak demand from heat waves, and impacts and recovery from intensified storms (ice storms, derecho, tornados).

IESO Response

Thank you for this feedback. The Nelson TS station refurbishment completed in 2022 was considered as part of this assessment, and the medium-term station capacity need remains.

Regional Planning is focused on addressing electricity system needs at the transmission system level, while Local Planning would consider distribution level concerns, including short-circuit issues. We encourage you to engage with your Local Distribution Companies (LDCs) to resolve any barriers to connecting new Distributed Energy Resources (DERs) or Distributed Generation (DG) through the LDC's Distribution Planning process. The Technical Working Group understands the importance of incorporating climate change impacts when developing a regional plan with a 20-year horizon. The TWG aims to consider this through the demand forecast and planning approach.

The Technical Working Group will develop forecast scenarios in the Integrated Regional Resource Plan based on known drivers, including, Climate Change Action Plans. The demand forecasts produced are then corrected to extreme weather, to ensure that the transmission system can tolerate demand during the hottest summers and coldest winters. The Technical Working Group aims to integrate climate forecasts into this methodology, so that anticipated changes to extreme weather are captured. For more details about the current extreme weather methodology please read more here.

Once these forecasts are finalized, technical studies will be undertaken to identify infrastructure

needs including the system's ability to respond to disturbances, such as the loss of a transmission line, which may be caused by extreme weather events.

After infrastructure needs have been identified, the Technical Working Group will assess multiple options to address these needs, including Distributed Energy Resources or Distributed Generation. If station upgrades are required to enable an option, these upgrades would be included in the scope of the option.

In the long term, the plan will focus on building flexibility and ensuring sufficient conditions have been explored to ensure an affordable and reliable system. The Technical Working Group will also take into consideration community support expressed for climate resilient infrastructure as part of the options evaluation process.

Township of Southwold recommended to ensure the forecast captures anticipated growth, development and additional variables including:

- Requests for high-capacity electrical service to the lands surrounding 11884
 Sunset Road and Talbotville Industrial Area.
- Ensure capacity for residential developments in Talbotville, Shedden and Fingal.

Thank you for this information. As part of the regional planning process, the IESO has shared this information with the Technical Working Group to confirm inclusion as part of the upcoming forecasting milestones. During upcoming milestones, the Technical Working Group will seek input from customers and communities on upcoming projects that could impact electricity demand such as community and load growth, and developments, in order to develop a draft demand forecast.

The Technical Working Group appreciates municipalities, customers and Indigenous communities keeping their Local Distribution Companies (LDCs) up to date on any new local developments to ensure electricity planning is aligned. The IESO will present the draft electricity demand forecast in an upcoming engagement session and encourages all interested parties to attend.

Ensure effective assessment of all solutions to meet identified needs arising from the forecast.

- Chippewas of the Thames First Nation has expressed an interest in local generation and district energy.
- Enwave Energy Corp. expresses the potential of district energy solutions to address heating in buildings and encourages the exploration of this technology for the London Area.
- EverGreen Energy Corp suggest the use of Magnetic Transducer Generators (MTG) throughout the London Area and other areas in the province.

Thank you for your input regarding potential solutions to meet current energy needs. To ensure Ontario's electricity system remains reliable, affordable and sustainable, an evaluation of different options to meet the needs is a key step.

Typically, as part of the regional planning process, once the forecast and needs have been finalized, the IESO will screen and evaluate wire and non-wire options, such as transmission-connected generation or storage, electricity and demand-side Management (eDSM), distributed generation and demand response to meet the needs and consider reliability, cost, technical feasibility, maximizing the use of the existing electricity system (where economic), and community preferences.

District heating and cooling will be considered on a case-by-case basis, dependent on the nature of the needs and customer interests, in the options analysis phase. The IESO welcomes more information from organizations for these options to be considered further.

The IESO will present needs and options in upcoming engagement sessions and encourages all interested parties to attend.

Chippewas of the Thames First Nation recommended that issues of outages and reliability be addressed through the regional planning process.

The Technical Working Group appreciates this information being brought to our attention. Regional planning addresses local electricity system needs at the transmission system level.

For highly localized needs that solely involve on area/municipality and local distribution company, a Local Plan is undertaken by the transmitter and affected local distribution company to examine the matter and provide a solution. We encourage you to work with your LDCs to share this feedback regarding outages.

Enbridge Gas Inc. requests to broaden aspects of the study including:

The Technical Working Group acknowledges the potential benefits of coordination between electricity planning processes and welcomes

- Consider one or more demand scenarios where gas and electric systems work together to achieve GHG targets and to utilize existing infrastructure to address increasing energy demands.
- Enbridge Gas Inc. would like to be included in the Technical Working Group to facilitate coordinated energy system planning.

further discussion and input on the options available to meet needs. During upcoming regional planning milestones, the Technical Working Group welcomes input and data from Enbridge Gas on the amount of demand that could be supplied from low-carbon fuels and options available to reduce demand.

The Ministry of Energy and Mines recently released the Minister's vision for Ontario's Affordable Energy Future. The <u>vision paper</u> reaffirmed the important role of integrated energy resource planning. The IESO looks forward to working with the Ministry of Energy and Mines, Ontario Energy Board, local distribution companies, municipalities, and gas utilities to inform a provincial integrated energy plan.

Lastly, the Technical Working Group membership is determined as per the Ontario Energy Board (OEB) established regional planning process, and includes the transmitter, the IESO, and LDC(s) that have customers in the electrical area.

Enwave Energy Corp. recommends the IESO explore procurement opportunities of district energy and low-carbon thermal energy solutions to meet electricity system needs, such as Long-Term Capacity Contracts and Avoided Capacity Contracts.

Once options have been recommended as part of the regional planning process, for non-wire solutions, implementation mechanisms for new resources and energy efficiency programs will be determined following plan publication.

Provincially, the IESO has developed the Resource Adequacy Framework which sets out a long-term competitive strategy to acquire resources while balancing ratepayer and supplier risks and recognizing the unique characteristics and contributions of different resource types. Engagement on these procurements is in various stages, and more information can be found on the IESO's Long-Term RFP Community Engagement website.

General Feedback

Feedback received shared local initiatives to forecast future energy demand, and the important role low-emission technologies will play in the energy transition.

Feedback / Common Themes

Additional Comments:

- The City of London, in consultation with Sustainability Solutions Group (SSG), shared their CityInSight modelling of future energy demand and associated GHG emissions under four scenarios: Business as usual, Current Measures (impacts of approved local, provincial and federal policies), Net-Zero, and Zero Carbon.
- EverGreen Energy Corp. expressed the need to support low-emission technologies that will facilitate the energy transition.

IESO Response

Thank you for sharing information on your city planning. The Technical Working Group will develop multiple forecasts to capture different demand scenarios. We encourage you to continue to communicate with your Local Distribution Companies (LDCs) and share community and energy plans, provide summer and winter demand forecasts for each station, and forecasting assumptions based on customer growth plans to ensure transparency and accuracy in developing the forecasts.

To ensure that Ontario's electricity system remains reliable, affordable and sustainable, an evaluation of different options to meet the needs is a key step. Typically, as part of the regional planning process, once the forecast scenarios and needs have been finalized, the Technical Working Group will screen and evaluate wire and non-wire options, such as transmission-connected generation or storage, electricity demand-side management (eDSM), distributed generation and demand response to meet the needs and consider reliability, cost, technical feasibility, maximizing the use of the existing electricity system (where economic), and community preferences.

For more details regarding the analysis of non-wire alternatives during IRRPs, the IESO has developed <u>a</u> guide to the current general approach for evaluating non-wires alternatives (NWAs).

The IESO will present needs and options in upcoming engagement sessions and encourages all interested parties to attend.