

# Windsor-Essex Region Electricity Planning Process Public Webinar #1 – December 12, 2023

## Response to feedback received

The IESO hosted a public webinar on December 12, 2023 for the Windsor-Essex region as part of its engagement to inform the development of a long-term electricity plan – Integrated Regional Resource Plan (IRRP). During the webinar, the IESO provided an overview of the regional electricity planning process and current status, shared the draft electricity demand forecast scenarios, and draft engagement plan for input. The presentation material and recorded webinar are available on the [engagement webpage](#).

The IESO appreciates the , which will be considered by the Technical Working Group<sup>1</sup> (TWG) to develop the IRRP. Feedback was received from the following parties and the full submission can be viewed on the [engagement webpage](#):

- [Enbridge Gas Inc.](#)
- [Invest Windsor-Essex](#)
- [Municipality of Lakeshore](#)
- [The Corporation of the City of Windsor](#)
- [The Corporation of the Town of Kingsville](#)
- [Town of Essex](#)

This document summarizes feedback received related to key developments, projects, and initiatives, as well as local issues and concerns that should be considered in the electricity planning for the Windsor-Essex Region.

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<sup>1</sup> The Technical Working Group is lead by the IESO, and consists of the LDCs in the region and the local transmitter (E.L.K. Energy Inc. (E.L.K.), Entegrus Powerlines Inc. (Entegrus), Enwin Utilities Ltd. (ENWIN), Essex Powerlines Corporation (EPLC) and Hydro One Networks Inc. (Hydro One)

## Electricity Demand Forecasts Considerations

Feedback	IESO Response
<p><b>Invest Windsor-Essex and the City of Windsor recommended that the Technical Working Group develop a third scenario.</b> Specifically, Invest Windsor-Essex recommended that an economic scenario be developed to help secure new business. The City of Windsor recommended a scenario that falls between the reference and high forecasts.</p> <p><b>The City of Windsor recommended to identify milestones for when investments will be required and shared that basing funding on the reference scenario could lead to infrastructure planning continuing to lag.</b></p> <p><b>Invest Windsor-Essex and the City of Windsor shared that considering climate change is critical.</b></p>	<p>To meet the region's needs, the Technical Working Group has developed two forecast scenarios that were directly informed by input from municipal, greenhouse and economic development representatives in the region over the past several months. These two scenarios allow for rigorous technical studies to be conducted to determine needs that would arise on the system in each case, develop a range of options, and prepare recommendations as part of the final plan to ensure a reliable and adequate supply of electricity to the region.</p> <p>By planning against two scenarios, this allows quicker action in the future if, and when, higher growth materializes. The reference forecast will drive firm near- and mid-term recommendations to address needs identified in the 5 to 10-year timeframe. This means that specific actions will be recommended in order to address a specified need and given year, based on the reference forecast. This will enable demand growth in a timely manner while minimizing ratepayer risks associated with overbuilding or building too early.</p> <p>Given the uncertainty of additional load, instead of identifying a trigger year, a load threshold approach will be used when considering load beyond the reference forecast scenario. The capability of the existing system will be identified and needs will be defined based on the amount of load that has to materialize in a location before that limitation is seen, i.e., if there is load beyond XX MW, then there is a supply need</p>

on YY path. Thus, from an electricity planning perspective, further system limitations will be identified and considered, regardless of where that load threshold may fall within a specific forecast.

Conditional recommendations for the high scenario allow the flexibility to undertake early development work and identify signposts to trigger further investments as growth above and beyond the reference forecast materializes. In essence, the timeframe for implementing any recommended actions in this scenario could be reduced as planning studies and early development work would have already been conducted.

Given this, the high forecast can be considered as an economic scenario (i.e. higher potential growth and development prospects), and the reference forecast can be considered as the probable demand level (i.e. firm growth and development). Further, both forecasts do account for a range of factors, including climate change and electrification, as well as economic development and growth.

**Enbridge recommended to develop a diversified scenario to include gas and that the energy transition should be factored into the forecast development.**

The Technical Working Group recognizes the potential benefits of coordination between electricity planning and gas planning processes. The IESO will work with Enbridge as it reviews the Windsor-Essex region electricity demand forecast and scenarios within this cycle of regional planning. Input from Enbridge on the amount of demand that could be supplied from low-carbon fuels is welcomed.

The Electrification and Energy Transition Panel's recently released its [final report](#), which consists of recommendations to help Ontario prepare for electrification and the

	<p>energy transition. One of the panel's principles is to ensure transparency and effective coordination in energy planning to facilitate the fuel switching, system optimization and enhanced levels of energy efficiency required by the clean energy economy. The IESO looks forward to working with the Ministry of Energy, Ontario Energy Board, Local Distribution Companies, municipalities and gas utilities to develop this framework.</p>
<p><b>Municipalities recommended that the IESO ensure the following growth and development inputs have been considered in the forecasts:</b></p> <ul style="list-style-type: none"> <li>• Town of Kingsville shared over 1,200 residential units on the west side, Sewage Treatment Facility expansion, and 4,000 additional acres for greenhouse development in the Leamington and Kingsville area by 2030, in addition to expanded settlement areas as part of the County of Essex Official Plan update.</li> <li>• Municipality of Lakeshore shared that it is important to ensure existing industrial business expansion and densification of residential areas can be accommodated.</li> <li>• Town of Essex shared that additional Employment Lands may be situated along Highway 3 and to consider planning for EV charging stations for Public Works fleet vehicles in Harrow, and at both municipal arenas in Essex and Harrow.</li> </ul> <p><b>Municipalities had shared the importance of considering the energy transition and electrification in the forecast scenarios, specifically:</b></p> <ul style="list-style-type: none"> <li>• City of Windsor shared that electrification of logistical companies should be included</li> </ul>	<p>The IESO appreciates the ongoing input from local municipalities about current, planned and potential growth that has been collected over the last nine months.</p> <p>The Technical Working Group has considered this additional information and if any changes are required, they will be incorporated into the forecasts.</p> <p>Electrification and energy plans have been incorporated by each local distribution company, and specific inputs shared by municipalities have been considered by the Technical Working Group. As outlined on slide 17 of the December 12, 2023 public webinar <a href="#">presentation</a>, these plans have been taken into account in both the reference and high forecast scenarios.</p> <p>We appreciate this ongoing input. Based on the inputs to date, work will start to finalize the forecast to allow the needs identification stage of the regional plan to proceed. Any further information received can be used to qualitatively inform the needs stage. It is important to keep your local distribution company and the IESO up to date on any new local developments as planning advances.</p>

<ul style="list-style-type: none"> <li>• Municipality of Lakeshore and Town Essex shared that electrification of vehicles and transit should be accounted for, as more homes have electric or hybrid vehicles</li> </ul>	
<p><b>Invest Windsor-Essex shared that the distributed generation resources are forecasted to increase, not decrease and should be reflected in the two scenarios.</b></p>	<p>The distributed generation resources accounted for in the Windsor-Essex forecast scenarios is a tally of existing resources, not a forecast. This is based on known information about resources that have a contractual relationship with the IESO or information provided by the local distribution companies. The decline in distributed generation over the forecast period is strictly based on the expected asset life of these facilities, aligned with assumptions used within the Annual Planning Outlook. This is meant as a conservative assumption, since it does not incorporate all distributed generation expected to appear on the distribution system, but rather the minimum amount that the IESO can contractually rely on.</p>

## Scope and Planning Approach

Feedback	IESO Response
<p><b>Municipality of Lakeshore and Town of Kingsville shared that distribution reliability is a concern.</b> Specifically Town of Kingsville had shared that building an additional line will address this issue.</p>	<p>We appreciate bringing this information to our attention. The Technical Working Group will consider how these concerns impact the regional system during the needs identification stage of the regional plan.</p> <p>For highly localized needs that solely involve one 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. This is conducted when needs a) are local in nature, b) require limited investments in wires (transmission or distribution) solutions, and c) do not require</p>

	<p>upstream transmission investments, which is the case here. As such, ELK Energy and Hydro One are coordinating to address this matter and will determine next steps through local planning.</p> <p>On the other hand, as part of the regional electricity planning process needs are identified more broadly across the region that i) impact more than one area/municipality and local distribution company and, ii) present an opportunity to explore a greater range of integrated solutions. As mentioned above, needs will be determined through technical studies and based on the two forecast scenarios, which is the next major milestone of this process.</p> <p>Regarding the additional line in Kingsville specifically, the requested feeder line is a distribution asset and is the responsibility of the local distribution company to carry out distribution network planning and where appropriate, build distribution infrastructure to address electricity needs and priorities at the local community level.</p>
<p><b>Municipalities had asked for clarification on preliminary needs identified and range of options considered, specifically:</b></p> <ul style="list-style-type: none"> <li>• Municipality of Lakeshore inquired about options being considered to address preliminary needs at Belle River TS.</li> <li>• Municipality of Lakeshore and the City of Windsor shared that CDM should be considered to meet local demand.</li> <li>• City of Windsor shared the existing system constraints should be considered and options to be developed, including DER and non-wire solutions.</li> <li>• City of Windsor noted that options should provide linkages detailing</li> </ul>	<p>As the first step in the regional planning process, the Technical Working Group has developed electricity demand forecast scenarios based on known drivers, including local economic development, growth plans and community energy and electrification plans. These scenarios form the basis of the regional electricity planning in identifying how much power is needed in the region over the next 20 years based on the inputs provided on current, planned and potential growth.</p> <p>Once these forecasts are finalized, technical studies will be undertaken to identify specific needs arising on the system, including location, magnitude and timing. As such, the Technical Working Group has not yet</p>

<p>system impacts in the event projects are delayed or cancelled.</p> <ul style="list-style-type: none"> <li>• Town of Kingsville shared that building a transmission line will help address distribution reliability.</li> </ul>	<p>considered any options to address needs, including preliminary findings from Hydro One’s Needs Assessment Report. Both wires and non-wires options, including conservation and distributed energy resources, will be considered in addressing the needs once they are identified. The Technical Working Group will also take into consideration community support expressed for distributed energy resources and non-wire solutions as part of the options evaluation process.</p> <p>The Technical Working Group will continue to monitor demand growth and transmission project development throughout the regional plan, and between regional planning cycles to ensure that regional plans adequately meet projected near- and mid-term needs.</p>
<p><b>Town of Lakeshore, the City of Windsor, Enbridge and Invest Windsor-Essex recommended that the IESO share data, assumptions and methodology used to develop forecast models and conduct analyses.</b></p> <p><b>Town of Essex and Invest Windsor-Essex shared that the IESO should consider sharing additional information:</b></p> <ul style="list-style-type: none"> <li>• Invest Windsor-Essex recommended providing historical demand by TS (31 years of history), forecast for capacity and historical DG load by TS.</li> <li>• Town of Essex shared that providing forecasts broken down by municipality would be helpful.</li> </ul>	<p>Data, assumptions and the methodology used to develop forecast models and conduct analyses will be included in the final electricity plan – Integrated Regional Resource Plan (IRRP) report, and shared at appropriate planning milestones. For example, <a href="#">Historical demand</a> and <a href="#">load forecast</a> data was shared during the forecast development stage, and posted on the <a href="#">engagement webpage</a>. Assumptions for the final forecast scenarios will be shared when draft needs are presented.</p> <p>For reference, the <a href="#">2019 Windsor-Essex IRRP, Addendum</a> and <a href="#">Appendices</a> provide context on assumptions and methodology from the previous planning cycle. The 2024 IRRP will provide similar information when completed.</p> <p>The IESO appreciates requests for information, and can consider sharing the historical demand by TS, forecast for capacity, and historical distributed generation. Please note the IESO has standard records retention policies. The IESO</p>

	<p>would welcome requests for one-on-one discussions to better understand further details around how this information will be used to ensure the information provided meets those needs.</p> <p>The IESO cannot provide forecasts broken down by municipalities since transmission stations can provide power to homes and businesses in multiple municipalities. <b>Historical</b> and <b>projected</b> demand are provided at the station level, which are posted on the <b>engagement webpage</b>. Local distribution companies can confirm which stations supply specific areas of the region, so this data can indicate how much is needed for your municipality. That being said, as technical studies are completed to identify needs in the region, the regional plan can be expected to outline load growth pockets in specific areas in the region.</p>
<p><b>Municipalities shared that an approach for how future growth will continue to be considered as part of future forecast development should be determined, specifically:</b></p> <ul style="list-style-type: none"> <li>• City of Windsor shared that a checklist of items for consideration for future forecasts should be developed.</li> <li>• City of Windsor recommended annual summaries detailing actual demand against forecasted demand and for the IESO to facilitate discussions as the region moves into the distribution planning phase.</li> <li>• Municipality of Lakeshore has recommended that the regional planning process should make recommendations to address reliability at the distribution level and requested that increased density be taken into account.</li> </ul>	<p>While regional electricity planning is undertaken on a cyclical basis, local distribution companies continue to update their local-level data to capture any new developments and projects. Should new needs materialize during this time that need to be studied, a new regional electricity planning cycle can be triggered early if an electricity need is brought forward by the transmitter, distributor, customers or the IESO.</p> <p>Additionally, the IESO endeavours to keep informed of regional growth trends and priorities in preparation for the next planning cycle. Municipalities, businesses and other community stakeholders are encouraged to keep their local distribution company and the IESO informed of any new information about growth, energy priorities and projects.</p> <p>The Ontario Energy Board initiated a consultation process to undertake a review</p>

- City of Windsor shared that clarifying roles and responsibilities to develop the forecast.

of the regional planning process to improve the efficiency and effectiveness of the current regional planning process. As the first step, the Ontario Energy Board re-established its Regional Planning Process Advisory Group consisting of the IESO, local distribution companies, municipalities, consumers, transmitters and other sector stakeholders. One of the key recommendations and actions from this work was to provide greater guidance on the development of demand forecasts and enhancing coordination between municipalities and local distribution companies. Two key resource documents were developed and released including:

- **Municipal Information Document – Improving the Electricity Planning Process in Ontario: Enhanced Coordination between Municipalities and Entities in the Electricity Sector**
- **Load Forecast Guideline for Ontario**

The IESO's engagement to date with municipal, economic development and greenhouse sector representatives in the region has been directly informed by the Ontario Energy Board's Regional Planning Process Advisory Group's work, including the use of enhanced worksheets and criteria for collecting inputs for demand forecast scenario development.

Once the two forecast scenarios are finalized, needs will be identified based on technical studies. Engagement with communities and stakeholders in the region will continue into the needs and options identification stages. Local input on the nature of identified needs and range of potential options will also be critical to informing next steps. Later into the process

as potential needs are evaluated and recommendations developed as part of the final regional plan, considerations on implementation will be an important consideration. This will include monitoring load growth between planning cycles through the annual Technical Working Group planning meeting, in order to keep a pulse on local developments and changes.

## Planned Engagement

Feedback	IESO Response
<p><b>Continued engagement and participation and feedback is important to ensure regional and local needs are communicated/considered throughout and after the process, including:</b></p> <ul style="list-style-type: none"> <li>• Municipality of Lakeshore and Town of Essex shared opportunities to engage after the regional planning process to keep all parties informed on defined and confirmed expansion plans.</li> <li>• Municipality of Leamington shared that individual meetings between municipalities, IESO and LDCs will continue to be critical.</li> <li>• Invest Windsor-Essex shared that having a schedule for engagement, offering a minimum of 10 business days to provide feedback, participating in one-on-one meetings, and offering collaborative meetings with multiple sectors would be helpful.</li> <li>• City of Windsor shared that offering collaborative meetings with multiple sectors is important.</li> </ul>	<p>Thank you for the feedback. Regional planning is a continual process, with electricity reliability evaluated at minimum every five years in each region. It can also be triggered earlier if an electricity need is brought forward by the transmitter, distributor, customers or the IESO.</p> <p>The IESO will continue to offer multiple engagement touchpoints, including individual meetings, collaborative meetings and webinars, and provide updates about the status of this work including upcoming opportunities for input and timing.</p> <p>Typically, for public webinars the IESO will offer a two-week comment period. For the December 12 webinar, the IESO posted the feedback form on December 6<sup>th</sup>, 2023, and accepted feedback until January 5<sup>th</sup> 2024.</p> <p>These discussions and ongoing dialogue will continue to be important following the completion of the regional plan in order to stay abreast of key local developments and changes. As noted earlier above, it is critical to remain engaged with your local distribution company in order to share this information.</p>

- Municipality of Lakeshore shared opportunities to engage after this the regional planning cycle is completed.

**Enbridge Gas shared they would appreciate the opportunity to be included in the Technical Working Group.**

The Technical Working Group recognizes the potential benefits of coordination between electricity planning and gas planning processes. The IESO welcomes the opportunity to work with Enbridge as part of the public engagement process. As the work progresses, the IESO will continue to host opportunities to share more details, including additional webinars, and opportunities for feedback.

As noted earlier, the Electrification and Energy Transition Panel's recently released [final report](#) consists of recommendations to help Ontario prepare for electrification and the energy transition. One of the panel's principles is to ensure transparency and effective coordination in energy planning to facilitate the fuel switching, system optimization and enhanced levels of energy efficiency required by the clean energy economy. The IESO is looking forward to working with the Ministry of Energy, Ontario Energy Board, local distribution companies, municipalities and gas utilities to develop this framework.

## General Comments/Feedback

### Feedback

### IESO Response

**City of Windsor and Invest Windsor-Essex wanted to understand how forecast and findings for the IRRP will be incorporated in the APO and future procurements**

The Annual Planning Outlook develops a 20-year forecast for the entire province, based on many factors, including but not limited to the state of the economy, population, demographics, technology, energy prices, input fuel choices, equipment-purchasing decisions, consumer behaviour, government policy and conservation. On the other hand, regional planning forecasts are developed using

more of a bottom-up approach, and are directly informed by the inputs received by the local distribution companies, municipalities and customers within the region. The final regional forecast will inform the next Annual Planning Outlook, but the two forecasts may differ for some regions because they serve different purposes.

In turn, the Annual Planning Outlook informs the planned actions in the Annual Acquisition Report, which translates planning and operational information into a series of acquisition requirements. It will signal anticipated targets and acquisition mechanisms to secure services to supply the province's needs over a variety of time frames. The IESO will continue to ensure that coordination exists between the Annual Planning Outlook, bulk system planning, and the various regional plans, to the greatest extent possible.

**City of Windsor shared that it is challenging to determine whether feedback and recommendations from prior engagements have been incorporated into the forecast or not.**

As part of the engagement process, the IESO will continue to meet with local municipalities and community stakeholders and conduct broader public engagement as planning work progresses. This will include outlining the feedback received and how inputs were considered and incorporated into work to date. For example, the public webinar held on December 12, 2023 outlined themes of inputs received from local municipal, economic development and greenhouse sector representatives through engagement discussions have been factored into each of the two demand forecast scenarios (see slides 15-20). As these forecast scenarios are finalized and needs identified, the IESO will continue to engage and seek input and those stages.

Should any parties have specific questions about inputs provide and how it was

incorporated into the forecasts, please  
reach out to  
[communityengagement@ieso.ca](mailto:communityengagement@ieso.ca).