# Feedback Received and IESO Response

## GTA North (York Region) Electricity Planning Process Public Webinar #1: Draft Forecast – November 26, 2024

The IESO hosted a public webinar on November 26, 2024, for the GTA North (York 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, shared the draft electricity demand forecast, and draft engagement plan for input. The presentation materials and recorded webinar are available on the engagement webpage.

The IESO appreciates the input, which will be considered by the Technical Working Group[1] 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.
- Enwave Energy Corporation
- MIDAC Corp.
- Town of Georgina
- Town of Stouffville

1 The Technical Working Group is lead by the IESO and consists of the LDCs in the region and the local transmitter (Alectra Utilities Corporation, Newmarket-Tay Power Distribution Ltd. and Hydro One.)

The section below 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 GTA North (York Region) electrical region.

## Considerations for the Electricity Demand Forecast

| Feedback / Common Themes | IESO Response |
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| The Town of Stouffville inquired about how unexpected rapid increases in population, and potential spikes in demand have been accounted for in the forecast. | Regional planning is a continual process with plans developed for a 20-year outlook but evaluated every five years at minimum. Throughout the process the IESO works with the local distribution companies (LDCs) and the transmitter to ensure regional issues and requirements are effectively integrated into the electricity planning processes.<br><br>To develop the draft demand forecast, forecast data is provided by each of the local distribution companies in the GTA North electrical area. The forecast data is based on established forecasting assumptions, customer connection requests, and insights from municipalities and stakeholders. The forecast forms the basis of the regional electricity planning process 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. Once the forecast is finalized, technical studies will be undertaken to identify specific needs arising on the system, including location, magnitude and timing. Both wires and non-wires options will be considered in addressing the needs once they are identified.<br><br>Furthermore, regional planning will typically recommend a multi-pronged approach to meet the growing demand. Options will continually be evaluated during further cycles and solutions will be triggered as needs begin to materialize on the system, allowing flexibility in the planning process. As planning continues to advance, it is |

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| | important to keep your local distribution company and the IESO up to date on any new local developments, such as new commercial, industrial or residential projects, as planning advances to ensure changes in demand are accounted for. |
| Provide more information regarding the forecast development and assumptions, specifically:<br>• Enbridge Gas Inc. recommended providing details regarding conservation and demand management being forecasted.<br>• Enwave Energy Corporation recommended sharing the detailed method and forecast for developing the baseline demand forecast for the area.<br>• The Town of Stouffville recommended sharing the methodology on how demand forecasts are calculated, including the different variables that are considered. | The IESO is committed to providing information throughout the Integrated Regional Resource Plan (IRRP) process, ensuring meaningful feedback and informed decision-making. To better understand how the GTA North (York Region) IRRP forecast was developed, the IESO has posted the detailed methodologies from the participating LDCs including Alectra, Hydro One Distribution, and Newmarket-Tay Hydro, available here. The draft load forecast data tables can be found here. |

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| Provide additional data regarding the forecast:<br>• MIDAC Corp. requested the IESO provide hourly demand forecasts for future loads until 2045 (or 2050 if possible) that are organized by categories such as transportation, electrification, low temperature building heating electrification, and high temperature industrial heating electrification.<br>• The Town of Georgina recommended sharing the greenhouse gas intensity of the electrical grid (and overall greenhouse gas emissions) in the past, present and in the forecasted scenarios. | The IESO is committed to providing information throughout the IRRP process, ensuring meaningful feedback and informed decision-making. Data and information to be made available during IRRP development is outlined in the IESO Regional Planning Information and Data Release Guideline.<br><br>The draft load forecast data is available online. During upcoming milestones, more information will be provided regarding the hourly demand and categorization as it pertains to evaluating different possible solutions.<br><br>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. |

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| Confirm whether the following inputs have been included in the forecast:<br>• The Town of Stouffville inquired as to whether the updated Official Plan, and forecasted population growth have been included.<br>• The Town of Georgina recommended sharing which climate actions were accounted for in the demand forecast and requested more information on the GHG intensity and emissions from Ontario's electricity grid in past forecasts. | Thank you for sharing details regarding growth and plans included in the forecast. To develop the draft demand forecast, forecast data is provided by each of the local distribution companies in the GTA North electrical area to the IESO. To enable meaningful feedback during the process and decisions to be made, the IESO has recently posted the detailed methodology which contains inputs from the local distribution companies including Alectra, Hydro One Distribution, and Newmarket-Tay Hydro. By sharing this information, the IESO also aims to promote transparency and enable more purposeful community and stakeholder participation and input. Please click here for the Forecast Methodology.<br><br>The IESO published province-wide historical and forecast greenhouse gas emissions information last year. This was based on a scenario analysis in March 2024. It includes total electricity sector emissions, as well as carbon emissions intensity. Please see the data for the graph for the Generation and Emissions Intensity here and the graph for the Total Emissions here. Updated emissions information will be provided in the upcoming 2025 Annual Planning Outlook.<br><br>**Hydro One response**: The Forecast Methodology covers the overall approach taken into account for climate actions and population growth. Furthermore, specific housing and industrial projects were included in the forecast, especially for the first 10 years, based on information received from developers and municipalities. |

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| Consider additional variables in the forecast development, specifically:<br>• MIDAC Corp. recommended using district heating and cooling systems instead of electrification for building heating and cooling systems in the development of the forecast.<br>Enbridge Gas Inc. recommended developing a diversified energy system approach in the York Region forecast. | The Technical Working Group acknowledges the benefits of coordination between electricity planning, gas planning processes, and district heating and cooling. As planning work advances, the Technical Working Group welcomes input on the amount of demand that can be supplied from low-carbon fuels and district energy. During upcoming regional planning milestones, the Technical Working Group will welcome input on options available to reduce demand using low-carbon fuels and district energy.<br><br>The Ministry of Energy and Mines recently released the Minister's vision for Ontario's Affordable Energy Future. The vision paper 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. |

## Considerations for Scope, Planning Approach, and Engagement

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| Positive feedback received regarding the engagement approach, specifically:<br>• Enbridge Gas Inc. appreciated the IESO's efforts to engage with stakeholders on the IRRP process.<br>• MIDAC Corp. shared that the engagement plan provides sufficient scope and opportunity for input, but more data should be available regarding options for heating. | Thank you for expressing support for how the IESO engages with stakeholders and welcomes recommendations around additional information to be provided. The IESO is committed to helping to ensure that interested parties are kept informed and are provided with opportunities for purposeful engagement to contribute to electricity planning initiatives.<br><br>Throughout the GTA North (York Region) IRRP process, we will continue to invite interested parties to a series of webinars and |

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| | targeted outreach activities to seek input on electricity needs, options analysis, and recommendations including the evaluation of technically feasible and cost-effective solutions. Through these engagement and outreach activities, communities will have the opportunity to provide feedback and discuss the potential solutions identified. |
| Share more information about the regional planning process, specifically:<br>• Enbridge Gas Inc. requested more details on how the regional electricity planning process addresses and ensures system resiliency of the electricity grid in York Region.<br>• The Town of Stouffville inquired about ensuring that the Town has adequate power supply beyond 2027. | Regional system planning ensures a reliable supply of electricity to Ontario's 21 electricity planning regions. This process looks at the unique needs of each region based on established North American grid reliability standards, and considers conservation, generation, transmission and distribution, and innovative resources to meet these needs.<br><br>Through this process, recommendations on how best to meet reliability needs after considering all these factors are developed. Regional planning is a continual process with plans developed for a 20- year outlook but evaluated every five years at minimum. Throughout the process, the IESO works with local distribution companies that serve the region and the transmitter to ensure regional issues and requirements are effectively integrated into the electricity planning processes. |

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| When developing the IRRP, non-wire solutions that are low cost, reliable, and meet the current energy needs, should be considered, specifically:<br><br>• Enwave Energy Corporation recommended to fully evaluate the potential of district energy, local thermal energy and electricity solutions.<br>• MIDAC Corp. recommended the possibility of using district heating and cooling systems for building heating and cooling in higher density urban areas and alternatives to heating electrification.<br><br>Enbridge Gas Inc. encouraged a coordinated and diversified approach to energy system planning in the GTA North (York Region) that includes both gas and electricity planning. | 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.<br><br>Typically, as part of the regional planning process, once the forecast and needs have been finalized, the IESO will screen and evaluate both wires 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.<br><br>District heating and cooling will be considered on a case-by-case basis, dependent on the nature of the needs, in the options analysis phase. The IESO welcomes more information from organizations for these options to be considered further.<br><br>The Technical Working Group acknowledges the potential benefits of coordination between electricity planning processes and welcomes 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.<br><br>The Ministry of Energy and Mines recently released the Minister's vision for Ontario's Affordable Energy Future. The vision paper reaffirmed the important role of integrated energy resource planning. The IESO looks |

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| | 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. |
| To support future engagements participants recommended sharing the following information:<br>• The Town of Stouffville recommended sharing a layout of the power distribution network, including locations for future infrastructure requirements.<br>• MIDAC Corp. recommended including cost data from the deployment of District Heating and Cooling Systems (DHCS) in northern Europe and Asia in the planning and technical/cost simulation studies.<br>• Enwave Energy Corporation recommended sharing details on the potential value of non-wire solutions to enable potential solution providers to develop options for considerations.<br>• Enbridge Gas Inc. suggested sharing more details regarding how Conservation and Demand Management (CDM) will be maximized and forecasted in the electricity planning. | Thank you for providing recommendations regarding additional information that should be shared during upcoming engagements. The IESO will consider these recommendations as planning continues to advance. |

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| Enbridge Gas Inc. requested to join the York Region IRRP 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 on options to address the needs identified in this plan and 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. The Technical Working Group membership reflects the parties who have shared responsibility for identifying and resolving the electricity reliability needs identified in the planning process.<br><br>As noted earlier, the Ministry of Energy and Mines released the Minister's vision for Ontario's Affordable Energy Future, and the vision paper 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. |

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| The Town of Stouffville recommended the IESO consider presenting information to local Councils. | The IESO is committed to continuing to engage municipalities in York Region on the development of this plan, and the Technical Working Group welcomes municipal input and perspectives as part of the regional plan. As planning work for the IRRP advances through each milestone the IESO will continue to host webinars which are accessible for everyone to attend. This provides opportunities for municipal representatives to share input and ask questions.<br><br>As part of the public engagement process the IESO welcomes the views and preferences of municipal representatives, for consideration in the development of the IRRP. |

## General Comments/Feedback

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| Enwave Energy Corporation discussed innovative procurement and contracting structures that could be used for thermal energy solutions to enable the value of these local solutions to the electricity system to be fully realized. | 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.<br><br>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. Designed to facilitate the transition to a more competitive procurement environment and better aligning acquisitions with evolving needs, the framework incorporates the mechanisms that will be used to purchase capacity in all time |

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| | frames: short, medium and long term. To maximize competition, acquisition mechanisms are expected to be open to all resource types that meet eligibility requirements. Engagement on these procurements is in various stages, and more information can be found on the IESO's website. |