Feedback Received and IESO Response

GTA West Regional Electricity Plan Public Webinar #1: Demand Forecast – June 2, 2025

The IESO hosted a public webinar on June 2, 2025 for the GTA West region to share the draft demand forecast and engagement plan for the GTA West electrical region. During the webinar, the IESO provided an overview of the regional electricity planning process, the GTA West electrical region, and shared the draft demand forecast. The presentation material and recorded webinar are available on the engagement webpage.

The IESO appreciates the input received, which will be considered by the Technical Working Group¹ to inform the final Scoping Assessment Report. Feedback was received from the following parties and the full submission can be viewed on the <u>engagement webpage</u>:

- Town of Caledon
- Enwave

The section below summarizes feedback received related to the demand forecast that should be considered in the electricity plan for the GTA West Region.

Note on Feedback Summary and IESO Response

The IESO appreciates the feedback received from stakeholders and communities. The tables set out below respond to the feedback received and are organized by topic.

¹ The Technical Working Group is lead by the IESO, and consists of the LDCs in the region (Alectra Utilities Inc., Burlington Hydro Inc., Milton Hydro Distribution Inc., Oakville Hydro Electricity Distribution Inc., Halton Hills Hydro Inc., and Hydro One Networks Inc. (Distribution)) and the local transmitter Hydro One Networks Inc.



A) Demand Forecast

Feedback / Common Themes

Consideration of the following inputs into the demand forecast, including:

- Enwave recommends the new Lakeview District Energy System (DES) in Mississauga, leveraging Region of Peel's municipal wastewater treatment facility, be included in the demand forecast.
- Enwave and Town of Caledon emphasize the need to factor in electrification. Town of Caledon has a net-zero by 2050 goal, and electrification of municipal buildings and vehicle fleet will be required to achieve these targets, including a Corporate Green Building Standard for new Town buildings to achieve net zero by 2030
- Town of Caledon is unclear if Hydro One has factored in the Caledon's net zero by 2050 goal when planning electrical capacity requirements for new industrial buildings.
- The Town of Caledon shared that population growth is expected to grow rapidly by 2050 (80,000 to 300,000), which will require new housing developments of over 65,000 homes in next 25 years and additional 1,530 hectares of employment land to be developed by 2051.
- Town of Caledon requests the IESO provide guidance to LDCs on the methodology to ensure municipal climate targets are included in the demand forecast.

IESO Response

Thank you for providing this feedback. The Technical Working Group (TWG) developed a draft demand forecast that considers economic growth, residential growth, and electrification. The TWG can confirm the following inputs were included in the draft demand forecast:

- electrification trends for transit and buildings
- Lakeview DES
- population growth and housing development details.

The IESO published the IRRP Forecast Methodology Document, and the corresponding data tables, to the GTA West engagement site. The Forecast Methodology covers the assumptions and approach used to create the demand forecast, as provided by the participating Local Distribution Companies (LDCs). Factors such as specific housing and industrial projects have been included in the forecast data, especially for the first 10 years, based on information available to LDCs from municipalities and developers seeking grid capacity. Municipal climate action targets (e.g., electrification) and population growth are also key factors used to develop forecasts.

The IESO will consider this recommendation to engage with municipalities and LDCs to improve methodologies for integrating local climate and electrification goals into electricity planning assumptions.

The IESO will continue working with Alectra through the TWG to better understand the impacts on electricity demand resulting from the proposed Lakeview DES. The IESO has met with Region of Peel staff to learn about some initial steps being taken at or near the Lakeview site and looks forward to continuing engaging with Enwave as the IRRP progresses.

B) Considerations for Potential Options

Feedback / Common Themes

forecast.

Consideration of non-wires alternatives, including:

- Enwave recommends the IESO evaluate the system value of district energy systems to electrify using thermal storage, and waste heat recovery.
- Town of Caledon requests that non-traditional solutions be considered in the IRRP to align with municipal planning to support renewable energy potential within Caledon. The Town of Caledon is undertaking a new renewable energy study to understand opportunities and can share results once complete.

IESO Response

As part of the IESO regional planning process, the IESO will screen and evaluate both wire and nonwire options (including transmission connected generation or storage, electricity demand side management, distributed generation resources, and demand responses) to meet the needs and consider reliability, cost, technical feasibility, maximizing the use of existing electricity systems (where economic) and community preferences. Certain options, such as thermal networks, district energy, and energy from waste systems can be considered on a case-by-case basis. Their contribution to the electrical system will be dependent upon the nature of the needs identified and any technical and economic information made available to the Working Group by district energy experts during the options analysis phase. Information from municipalities is also critical to further the Working Group's understanding of opportunities for district energy systems in the context of a regional electricity plan and considering the highly site-specific nature of these systems. The IESO continues to welcome more information from organizations and municipalities about these options, including the Town of Caledon's renewable energy study. As the feedback references the potential for district energy systems to be electric, or to electrify, the specific nature and location of these systems would be of interest.

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

C) Feedback on Engagement

Feedback / Common Themes

Considerations for data transparency, engagement and collaboration, including:

- Enwave and Town of Caledon requested more detailed forecasting assumptions and methodologies. Enwave requested details, such as technologies and adoption rates, new land uses by sector, assumptions for heating/cooling.
- Enwave welcomes opportunities to support the Technical Working Group in assessment of district energy systems.
- Town of Caledon proposed municipal engagement to ensure local planning challenges and municipal climate targets are included in the plan.
- Town of Caledon cites it is important to understand how the IESO works with the LDCs to factor in community energy needs, and how the IESO evaluates wires and non-wires solutions.

IESO Response

The Technical Working Group, led by the IESO and comprised of LDCs and transmitters, work together to develop the Integrated Regional Resource Plan (IRRP). The IESO strives to make information available throughout the development of the IRRP to ensure meaningful input and support informed decision making. The data and information that will be made available during IRRP development is outlined in the IESO Regional Planning Information and Data Release Guidelines. Forecast Methodologies and detailed forecast Data Tables are posted to the IESO's GTA West engagement website. The IESO will continue to work with the technical working group and will update the Forecast Methodology document as more detailed assumptions become available.

Municipal engagement within the GTA West region has been instrumental in gathering information and insights on electrical demand drivers, including local economic development, growth plans, community energy and electrification plans, and climate targets. Both wires and non-wires options will be considered in addressing the needs once they are identified. The IESO will present needs and options in upcoming public engagement sessions and encourages all interested parties to attend and share feedback. Targeted engagement sessions will provide municipal representatives an opportunity to understand the plan and provide feedback.

D) General Feedback

Feedback / Common Themes

Considerations for regional planning such as capacity constraints, including:

 As part of the regional planning consideration should be given to ensuring that Caledon can grow beyond 2030. Based on conversation with the LDC, the Town Caledon understands that there is no additional capacity to service Caledon's growth beyond 2030. Capacity constraints are impacting Caledon's ability to

IESO Response

Thank you for this information. The regional electricity planning process will identify how much power is needed in the region over the next 20 years based on the inputs provided on current, planned and potential growth. The regional plan will address capacity constraints within the GTA West region and help position the system for growth.

As growth materializes, the TWG will continue to monitor developments and track progress towards IRRP plan deliverables. The regional planning process is designed to be flexible and allows the install renewable energy and force new industrial development applications to use natural gas as an energy source. IESO the ability to assess and respond to changing conditions and system needs as necessary.

Consideration of procurement mechanisms to enable non-wire solutions, including:

Enwave recommends the IESO evaluate
procurement mechanisms to support
deployment of district energy systems, and
electricity system contracts that recognize the
system's value in reducing infrastructure needs,
to enable broader, cost-effective expansion of
district energy.

Thank you for this feedback. The IESO has developed the Resource Adequacy Framework which sets out long-term competitive strategy to acquire resources while balancing ratepayer and supplier risks and recognizing the unique characteristics and contributions of different resource types. The framework incorporates the mechanisms that will be used to purchase capacity in all timeframes: short, medium and long term. Resource procurements are open to diverse resource types that meet eligibility requirements. More information can be found on the IESO's website.

Recently, the Ministry of Energy and Mines released the province's Integrated Energy Plan ('Energy for Generations') that includes direction to the IESO to identify opportunities for new and existing district energy systems. The IESO looks forward to engaging more to understand opportunities for district energy systems to support the provinces broader electricity system needs.