

Feedback Form

Regional Electricity Planning in the GTA West Region – June 2, 2025

Feedback Provided by:

Name: Katherine Sparkes

Title: VP, Grid Solutions

Organization: Enwave Energy Corporation

Email: [REDACTED]

Date: June 24, 2025

To promote transparency, feedback submitted will be posted on the GTA West [engagement webpage](#) unless otherwise requested by the sender.

Following the GTA West regional planning webinar held on June 2, 2025, the Independent Electricity System Operator (IESO) is seeking feedback on the draft electricity demand forecast and Engagement Plan. A copy of the presentation as well as recording of the session can be accessed from the [engagement web page](#).

Please submit feedback to engagement@ieso.ca by June 23, 2025.

Topic	Feedback
What additional information, if any, should be incorporated in the proposed electricity demand scenario? How can the proposed scenario best capture the range and uncertainty of growth potential while informing near-term infrastructure investments?	The proposed demand scenario should consider that Enwave Energy Corporation in partnership with Lakeview Community Partners Ltd, the Region of Peel and the City of Mississauga are developing a new district energy system (DES) at the former site of the Lakeview coal plant in southern Mississauga. This new DES will leverage the Region of Peel's G.E. Booth Water Resource Recovery Facility as the source of heating and cooling for the new Lakeview community. Heat will be moved from buildings to the waste water when the buildings need to be cooled and heat will be pulled from the waste water when the buildings need to be heated. The DES will provide electricity efficient, low carbon heating and cooling to the 16,000 new homes in the Lakeview community. First occupancy of the new homes is expected in 2029. The IESO's options scenarios should assess the potential for the expansion of the Lakeview district energy system beyond the existing new Lakeview community to serve other existing and new buildings in Mississauga as a cost-effective alternative to stand-alone in building electrified solutions (i.e. electric heat pumps) and a cost-effective replacement for existing stand-alone natural gas heating systems as they come to end of life in existing buildings. The IESO's options scenario should also assess the potential for new district energy systems to be developed as cost-effective alternatives for electricity ratepayers to stand-alone in-building electrified solutions across the GTA West area – with potential to leverage local energy sources – e.g. energy from waste (EfW), large scale thermal storage, heat recovery from data centres and other sources using heat recovery heat pumps. Enwave would be pleased to support the IESO and IRRP Technical Working Group (TWG) in assessing the electricity system value and cost-benefits of these solutions.

Topic	Feedback
What local issues and concerns should be considered in the electricity planning?	The GTA West region is experiencing rapid development, particularly in areas such as Milton, Halton Hills, and along the Highway 413 corridor. This presents both challenges and opportunities for electricity planning. Enwave requests the IESO to assess: 1) the potential for district energy systems in new communities to reduce electricity demand for heating and cooling; and 2) the integration of waste heat recovery from industrial, commercial or other sources (e.g. data centres) which would allow more new loads to be connected per unit of available transmission or distribution infrastructure or generation/peak capacity. We also recommend that the IESO consider how innovative procurement mechanisms could support the deployment of these solutions, including avoided capacity contracts and long-term agreements for dispatchable electrified district energy (i.e. district energy systems that commit to reducing demand during system peaks in response to IESO market signals).
What information is important to provide to participants throughout this engagement?	Stakeholders would benefit from: detailed documentation of the assumptions and methodologies used in the demand forecast, including the specific technologies and adoption rates assumed for space and process heating. Enwave requests that the IESO provide details on the forecasted growth of new land uses by type (e.g. residential, commercial, industrial), floor area and technology assumptions for heating and cooling (i.e. % of forecasted new residential floor area assumed to be heated/cooled by electric heat pumps vs. natural gas). The data provided should be at a level that would allow for replication of the forecast results using the data provided (i.e. additional data is required relative to what is provided in the document "IRRP Forecasting Methodology" and associated data tables.
Does the proposed Engagement Plan provide sufficient scope and opportunities for input?	Enwave requests the opportunity to meet and work with the IESO and TWG to discuss the potential for expanded district energy (e.g. the expansion of the new Lakeview DES beyond the current Lakeview community) and new DE as cost-effective solutions to reduce new capacity or energy needs otherwise

Topic	Feedback
	required through stand-alone in building heating and cooling solutions. Per the June 12, 2025 directive to the IESO to implement Ontario's new integrated energy plan <i>"Energy for Generations: Ontario's Integrated Plan to Power the Strongest Economy in the G7"</i> Enwave also requests that the GTA West IRRP includes options for procuring new/expanded DE in the GTA West region that recognize the electricity system value of DES. Enwave requests the opportunity to work with the IESO and TWG to develop these procurement options.

General Comments/Feedback

Thank you to the IESO and the GTA West IRRP Technical Working Group (TWG) for the opportunity to comment and contribute to the GTA West IRRP development. Enwave would also like to thank Ontario's Minister of Energy & Mines the Honourable Stephen Lecce, the Associate Minister of Energy-Intensive Industries the Honourable Sam Oosterhoff and the Government of Ontario for recognizing the value of expanded district energy to Ontario's electricity system in Ontario's first integrated energy plan, released in June 2025.

As indicated above, Enwave, Lakeview Community Partners Limited, the Region of Peel, and the City of Mississauga are working together to build a new district energy system that leverages energy from the Region of Peel's municipal waste water treatment facility to provide reliable heating and cooling to the new 16,000 home community of Lakeview in southern Mississauga. This new DES will reduce the electricity (generation and capacity) otherwise required to heat and cool this new community. There is the potential to expand this facility to serve other existing and new buildings beyond the new community of Lakeview if the electricity system value of this district energy system (in terms of avoided new capacity, generation, transmission and distribution infrastructure otherwise required) is appropriately recognized by electricity system contracts, while thermal energy customers cover their share of the thermal energy benefits. This approach of having electricity ratepayers pay for the electricity system value of district energy while thermal energy customers pay for the thermal energy services they benefit from follows the "beneficiary pays" principle used in electricity ratemaking in Ontario and elsewhere and can enable district energy to be expanded more quickly – for example making it cost-effective to connect smaller buildings or buildings further from the existing district energy system that would not be cost-effective if thermal energy customers were funding both the electricity system and thermal benefits. Enwave requests and welcomes the opportunity to work with the IESO and the applicable local distribution and transmission companies to evaluate the

potential for district energy and other local clean thermal energy and electricity solutions (e.g. heat recovery from data centres, thermal energy storage) to reduce electricity needs in the GTA West and to discuss innovative procurement and contracting structures that could be used to enable the value of these local solutions to the electricity system to be fully realized.