Feedback Form

Regional Electricity Planning in Toronto – December 5, 2024

Feedback Provided by:

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To promote transparency, feedback submitted will be posted on this engagement webpage unless otherwise requested by the sender.

Following the Toronto regional planning webinar held on December 5, 2024, the Independent Electricity System Operator (IESO) is seeking feedback on the draft regional electricity needs and the Local Achievable Potential Study. A copy of the presentations as well as recordings of the sessions can be accessed from the engagement web page.

Please submit feedback to engagement@ieso.ca by January 3, 2025.

Regional Planning - Draft Electricity Needs

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What feedback do you have regarding the draft electricity needs identified?	With the projected regional electricity growth of 70-100%, it is not clear how system reliability and resiliency will be assured, especially during peak demand periods and in contemplation of the Portlands Energy Centre (PEC) retirement scenario. In the Toronto IRRP Forecasting Methodology, Table 4 Electrified Heating Adoption Rates, it would be beneficial if IESO could provide the total number of dwellings/buildings forecasts (or estimate), such that a gross number of residential dwellings and commercial and industrial buildings forecasted for heating electrification be calculated. Enbridge Gas would also like to understand how electrified heating adoption rates will be monitored and tracked over time (i.e., comparison between forecasts and actuals).
What feedback do you have regarding how to meet the electricity needs to inform upcoming milestones?	Improved energy efficiency is paramount in meeting increasing energy demands while minimizing additional infrastructure build-out. Enbridge commends IESO for initiating its local Achievable Potential Study (LAPS) for the Toronto Region. More comments regarding LAPS are provided below. Enbridge Gas suggests that due consideration be given to the opportunity that hybrid heating presents. The IESO should explore hybrid heating as a viable non-wires alternative particularly in subsystems or downstream of transformer stations that have a large portion of forecast demand coming from residential electrification. Hybrid heating presents an immediate opportunity to lower peak electricity demand, facilitate broader electrification, and achieve near-term reductions in GHG emissions. Implementing hybrid heating systems on a large scale, equipped with smart controls, offers a cost-effective behind-the-meter demand response solution that can help alleviate forecasted peak electricity loads and reduce the need for investments in new supply resources and transmission infrastructure. Additionally, for meeting long-term supply needs (as in transmission or distribution connected resources), renewable natural gas (RNG), hydrogen, and natural gas combined with carbon capture, utilization, and storage (CCUS) should be considered. Hybrid heating leverages the existing gas system during peak demand periods and would reduce the need to build-

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	out the electric system solely for peak demand management.
What additional information should be considered as we screen high-level potential options?	In line with the Government of Ontario's 'all of the above' energy plan approach, Enbridge Gas suggests that further consideration be given to how the Enbridge Gas system in Toronto could be leveraged to support the electric system in the near, medium and long terms. The natural gas system can support and/or minimize peak demand on the electric system via coordinated planning on the system level (low-carbon fired power generation) and on the dwelling/premise level (hybrid heating). Enbridge Gas would be pleased to explore these opportunities with the Technical Working Group (TWG). As noted in IESO's Feedback Form from the April 16, 2024 Webinar, Enbridge Gas is awaiting direction from the IESO on how best to engage with the TWG. Enbridge Gas is ready to provide technical input and insights related to Enbridge's system and would readily contribute to the preliminary option evaluation process.
What additional information should be provided in future engagements to help understand perspectives and insights?	With various demand scenarios evaluated, it would be helpful for IESO to provide information and updates on how forecasted demand vs actuals are measured and compared, especially as electricity demand is projected to rapidly increase. This information would be of use to Enbridge Gas in our demand forecasting process and ensure on-going energy security for all Torontonians as energy transition unfolds over time.

Local Achievable Potential Study (LAPS)

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What feedback do you have on the scope that the IESO should consider?	In line with the government's recent proposed legislative amendments that would enable the development of Ontario's first Integrated Energy Resource Plan and foster collaboration between the gas and electricity sectors, Enbridge believes that an "all-of-the-above" approach to energy planning will maintain flexibility in addressing immediate and future energy challenges and ensure customer choice. Enbridge Gas would like to engage with

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	IESO on the development of the LAPS for the Toronto and Ottawa Regions. Enbridge Gas is interested in learning more on if or how Enbridge Gas data could be incorporated, if appropriate. Enbridge Gas welcomes the opportunity to discuss the LAPS further with IESO, especially given the provinces direction for enhanced coordination with respect to Demand Side Management via a 'One Window' approach and via integrated energy planning.
What feedback do you have on the methodology that the IESO should consider?	The LAPS Technical Approach Memo indicates that the high electrification scenario is based on the Canada's Energy Future 2023 Canada Net-Zero Scenario. The Toronto IRRP Forecasting Methodology indicates that the high electrification scenario is based on Toronto's TransformTO strategy and targets. Enbridge recommends that the IESO provides a comparison between the two high electrification scenarios and indicate how the two forecasts are different and how the differences may impact IESO's assessments and/or be reconciled.
What feedback do you have on the potential uses for the LAPS that the IESO should consider?	Click or tap here to enter text.
What additional sources or regional policies and trends should be considered?	Click or tap here to enter text.

General Comments/Feedback

Enbridge Gas advocates for a coordinated approach to energy system planning between the electric and gas sectors to identify the most reliable, resilient and affordable pathway to greenhouse gas (GHG) emissions reductions. A well-rounded and coordinated planning strategy will help optimize the energy systems in the Toronto Region, while also supporting the GHG emission reduction targets and meeting the region's growing energy demands. Coordination should occur at both distribution and transmission system planning levels to fully leverage existing systems.

Enbridge Gas appreciates IESO's efforts in taking steps towards more collaborative and coordinated energy planning by including Enbridge Gas as an observer in the Ottawa Region working group and in the development of the Windsor-Essex Integrated Regional Resource Plan (IRRP). Collaboration efforts such as these enable more strategic and efficient investments to be made, which deliver significant benefits to the subject region. As noted above, Enbridge Gas is ready to participate in the TWG for the Toronto Region and to contribute to the development of the LAPS, both of which will drive greater energy planning results for the Toronto Region.