Feedback Form

GTA North Regional Electricity Planning - July 8, 2025

Feedback Provided by:

Name: Paul Acchione

Title: Management Consultant

Organization: MIDAC

Email: [redacted]

Date: Jul 17, 2024

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

The Independent Electricity System Operator (IESO) is seeking feedback on the draft needs and options screening webinar. A copy of the presentation and webinar can be accessed from the engagement web page.

Please submit feedback to engagement@ieso.ca by **July 29, 2025.**

Topic	Feedback
Your perspectives on high level wire and non-wire options screening.	I agree that all options should be considered in light of the significant anticipated load growth expected by IESO by 2050. Those options should include government energy policy to more proactively deploy district heating in higher density urban areas currently served by natural

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	gas. However, please see my comment about the York Energy Centre below.
Additional info that should be considered in the assessment of these options.	The IESO APO studies of anticipated demand to 2050 does not include the conversion of natural gas heating to air source heat pumps with resistance heating backup for all existing buildings where natural gas is available. Recent federal and provincial incentives for ASHPs do not restrict the incentives to ASHPs sized for air conditioning. If larger ASHPs are purchased with resistance heating backup, the impact on the load demand in winter will be much worse than IESO is currently planning for. Simulation studies by the Boltzmann Institute show that the overall power system load capacity factor will drop to about ½ of the current value by 2050. Electricity rates will need to double in real dollar terms for all consumers. The new-build system expansion to accommodate ASHPs and resistance backup heating during the 25-year period to 2050 has never been achieved historically in Ontario. The electricity sector will be hard pressed to meet the needs in the next 25 years for electrification of transportation, AI data center expansion and population growth without the additional demands of electrification of heating of existing buildings. I encourage the IESO planning staff to review the recent Boltzmann Institute 2-year study on heating options for buildings where natural gas is currently used. The Boltzmann Institute study suggests alternatives that will make the transition away from natural gas more achievable and affordable than electrification using ASHPs and resistance heating backup. The Boltzmann Institute study report can be accessed at: https://bi-ib.ca/wp-content/uploads/2025/06/Two_Pathways_Executive_Summary.pdf
Perspectives on reducing reliance on York Energy Center, including if transmission is the alternative option.	The IESO is probably aware that the York Energy Centre was originally developed because the Newmarket community refused to accept the recommended transmission line upgrade to Newmarket. Mothers in the community were concerned that EMI emissions from the transmission lines would adversely affect the health of their children. I would recommend, that before spending a lot of time and money on options to phase out the York Energy Centre, the IESO should survey the local Newmarket population again to see if community transmission health concerns have abated. If not, renewing the York Energy Centre contract or expanding the site's capacity to meet load growth demands may be the only politically practical option.

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Information that should be provided in future engagements to help understand perspectives and insights.	It would be helpful if the IESO provided a realistic assessment of Ontario's human and resource capabilities over the next 25 years to meet the IESO's electrical load growth forecasts especially in light of other government priorities including additional housing, public infrastructure and additional industrialization. Also, if OPG's development of SMRs at Darlington proves to be commercially successful, and if those SMRs can be distributed closer to the loads they serve, the need for transmission will change significantly. The IESO plan should acknowledge that potential impact on its plans if SMRs can be successfully distributed.

General Comments/Feedback

Excellent IESO presentation. I appreciate the opportunity to comment.