Feedback Form

Regional Electricity Planning in the Toronto Region – July 10, 2025

Feedback Provided by:

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

Following the Toronto regional planning webinar held on July 10, 2025, the Independent Electricity System Operator (IESO) is seeking feedback on the results of the options screening. 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 July 25, 2025.

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What feedback do you have regarding the results of the wire and non-wire options screening?	Thank you for screening out gas generation. Overall, the screening criteria are based on the forecasted electricity needs, the capability of an option to meet the identified needs, and then the technical feasibility and the cost-effectiveness of the option. Only if options are equivalent based on these criteria, are stakeholder and community preferences taken into consideration. This process does not include evaluation of the options' impacts on the environment or on human health. While these may be included as part of the stakeholder and community feedback, it would be preferential to explicitly include these criteria, such as estimated reduction of GHG emissions, as an important factor in options screening. As a future recommendation, battery storage technology is rapidly changing, and the decisions which resulted in battery storage being screened out should re-evaluated on an on-going basis. [K. Rangelova, et al, "Solar Electricity Every Hour of Every Day is Here and it Changes Everything," Ember Energy, June 2025 https://ember-energy.org/app/uploads/2025/06/Ember-24-Hour-Solar-Electricity-June-2025-6.pdfm]
What feedback do you have on the preliminary transmission wire options?	Regarding the need for a third Supply Line into Toronto, the European Union (EU), unlike Ontario, has given itself an energy reduction target. As per the European Commission, "The 2023 revised directive raises the EU energy efficiency target, making it binding for EU countries to collectively ensure an additional 11.7% reduction in energy consumption by 2030, compared to the projections of the EU reference scenario 2020." [https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficiency-targets-directive-and-rules/energy-efficiency-directive_en] This is in contrast to Ontario, which is adding new gas-fueled gas generators, and building new nuclear plants to meet its anticipated 75% increase by 2050. Ontario and Europe are in different circumstances, with Ontario growing and Europe remaining relative stable, however Europe is working to decouple its natural resource use and environmental impacts from economic growth [https://www.eea.europa.eu/policy-

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	documents/decoupling-natural-resource-use-and?utm_source]. While supply-side expansion may be necessary, demand-side management and efficiency should be prioritized to avoid overbuilding infrastructure and exacerbating environmental impacts.
What feedback do you have regarding how screened-in options could inform the options analysis and draft recommendations?	In screening for energy efficiency, and the mention of "reduce demand through District Energy" we want to highly recommend exploring District Energy systems for their efficiency and doing everything possible to facilitate expanding this well-proven technology (for example, enabling Toronto Hydro to take an active role.) As part of the modelling for the Local Achievable Potential Study, we recommend that the City of Toronto be encouraged to conduct a heating planning study to look for available sources of thermal energy. Again, the EU's "recast EU Energy Efficiency Directive, adopted in July 2023 includes a new obligation (Article 25.6), which requires Member States to ensure that municipalities with over 45 000 inhabitants prepare local heating and cooling plans. This proposition can be a GAME CHANGER to decarbonize the heating and cooling sector, and to provide citizens with healthier and more resilient living environments". [https://energy-cities.eu/local-heating-and-cooling-plan/] Please keep in mind that energy peaks which will result from a commitment to air source heat pumps could be significantly mitigated with the use of geothermal heat pumps and geothermal district energy which are both renewable, much less subject to peaks, and overall, more energy efficient producing less GHG. [Grid Cost and Total Emissions Reductions Through Mass Deployment of Geothermal Heat Pumps for Building Heating and Cooling Electrification in United States. [https://info.ornl.gov/sites/publications/Files/Pub196793.pdf]
Additional information that should be provided in future engagements to help understand perspectives and insights.	Subject: South and Centre Bulk Study - Regarding the IESO decision that it is not appropriate to further consider offshore wind due to the Provincial Moratorium on offshore wind. We urge the expansion of the modeling scope to include reverse planning by starting with the 2050 goals for both GHG reduction, and projected electricity demand, and working backwards to understand what must be done now

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	to achieve them. It is likely that this will show that 2050 goals can only be achieved by the inclusion of offshore wind, as well as a significantly expanded inclusion of solar energy, battery storage, geothermal and district energy systems. Including offshore wind into consideration would demonstrate to Ontarians the potential of this alternative. For example, Nova Scotia plans to license enough offshore wind capacity to produce up to 40 gigawatts of electricity—far more than its provincial demand. [https://novascotia.ca/offshore-wind/] There is also substantial research on the potential for offshore wind development in the Great Lakes. Relevant studies include "Great Lakes Wind Energy Challenges and Opportunities Assessment". This study found, on the US side, 160 gigawatts of energy from turbines fixed to the lakebed and 415 gigawatts of energy from floating (deep water) turbines - a total of 575 gigawatts. [https://docs.nrel.gov/docs/fy23osti/84605.pdf]. Ontario Power Authority undertook their own study in April 2008, "Analysis of Future Offshore Wind Farm Development in Ontario". We encourage the IESO to revisit these analyses and assess how offshore wind could contribute to Ontario's future energy system in a decarbonized economy.

General Comments/Feedback

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