Local Achievable Potential Study Webinar – August 21, 2025

Feedback Provided by:

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

Following the Toronto Local Achievable Potential Study (L-APS) webinar held on August 21, 2025, the Independent Electricity System Operator (IESO) is seeking feedback on the draft findings. A copy of the presentations as well as a recording of the session can be accessed from the engagement web page.

Please submit feedback to engagement@ieso.ca by September 11, 2025.

Topic	Feedback
What feedback do you have on the L-APS draft findings?	**The IESO's role when facing inconsistencies within the Electricity Act**

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	TEECC recognizes that the IESO operates within provincial policy constraints, including the current moratorium on offshore wind projects. However, as the IESO is composed of engineers and experts in the field, we believe it is the IESO's responsibility to advise the government when such constraints run counter to the public interest. The IESO has clear statutory objectives under the Electricity Act, including the mandate "*to engage in activities that promote electrification and facilitate energy efficiency measures aimed at using electricity to reduce overall emissions in Ontario*" (Electricity Act, section 6(1)(p.1)). It is inconsistent to pursue emissions reductions through electrification if the electricity itself is generated from high-emission sources—especially when non-emitting alternatives are available but have been excluded by government direction. This is precisely the situation Ontario now faces. We believe the IESO has a duty to inform the government that these restrictions are misguided and to identify alternatives that will both lower costs and reduce emissions. **Inconsistent Priorities** In the recent Options Screening presentation, the emphasis was placed on cost to ratepayers as the primary criterion: *"Typically, the option with the lowest cost to the ratepayers is selected as a preferred recommendation in the IRP. If the economic performance of different options are similar, then those options would be subject to other considerations such as community preference before arriving at a recommendation."* The Regional Planning Committee has also stated in their response to feedback on the Options Screening that: *"At this time, the IESO does not account for GHG emissions reductions, environmental and health impacts, or equity impacts in the analysis as quantitative inputs or metrics. However, participants are encouraged to provide feedback*

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	on these themes to be considered as part of community preference." Together, these statements raise concerns for the L-APS phase. Focusing primarily on cost while excluding GHG reductions, health, environmental, and equity impacts as quantitative inputs appears to be inconsistent with statutory objectives. TEECC emphasises the importance of policies to advance climate objectives as well as protect the health of all residents of the province. We believe that health and long-term viability of the environment are primary objectives of any government and therefore of any government agency. It is irresponsible to knowingly compromise the health of the population at large. The IESO's planning approach should ensure a balanced evaluation of innovative solutions, whose merits become clearer when GHG reductions and health impacts are considered. Without such factors, the analysis undervalues options that could deliver long-term benefits.
Is there additional information that should be considered before L-APS findings are finalized?	**Thermal Energy Networks (aka. District Heating and Cooling Networks)** We ask that the Regional Planning Committee consider utility scale district systems which take their energy from the ground, wastewater and waste heat. We ask that the The Regional Planning Committee consult the results of Toronto Hydro's RFP #24P-1663 *For the supply of Thermal Energy Networks*. Thermal Energy Networks demand less electricity in comparison with air source heat pumps and are especially effective at reducing peak demand. District energy networks are over 50% more efficient than air source heat pumps during times of peak demand in single family homes (City of Toronto, Environment and Climate Change). A US Department of Energy study showed mass ground source heat pump (the heart of thermal energy networks) reduced electrical grid requirements by 33%.

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	Please reference also the US study *Grid Cost and Total Emissions Reduction Through Mass Deployment of Geothermal Heat Pumps for Building Heating and Cooling Electrification in the United States*, November 2023 https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://info.ornl.gov/sites/publications/Files/Pub196793.pdf&ved=2ahUKEwjZxLGl6uCPAxUJM9AFHdQOOY8QFnoECAwQAQ&usg=AOvVaw1eN0TOEGtD5olOIxwylnCQ When built at utility scale, thermal energy networks provide heating and cooling for all, rich and poor, and for all buildings, large and small. Thermal networks offer the possibility of thermal storage at a price that is substantially less than batteries. We believe that thermal energy networks deserve serious evaluation and should be part of the L-APS analysis. **Battery Storage** It would be helpful to know the cost basis on which battery use was decided. The cost of battery storage is falling precipitously. By 2035, costs are projected to fall by 56% (low), 28% (medium), and -2% (high). *Note*. US based study. Costs include potential impact of tariffs which may not apply in Canada. In light of substantially lower prices, can batteries play a larger role? *Cost Projections for Utility-Scale Battery Storage: 2025 Update*, NREL, U.S. Department of Energy, 2025. https://www.nrel.gov/docs/fy25osti/93281.pdf)
Are there specific modelling methodology or assumption topics that you would like to see discussed in the final public report?	Click or tap here to enter text.
How can the IESO best communicate with communities and stakeholders on actioning the additional electricity	It would be helpful to change the presentation style of the Public Webinars. Currently, the presenters are speaking quickly, apparently reading from prepared scripts, and not reviewing the content of the supporting slides. In addition,

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demand-side management opportunities identified in the study?	it would be helpful if there were educational seminars provided in advance to improve audience understanding.

General Comments/Feedback

Great Lakes Wind

TEECC would like to reiterate a point made during the Options Screening phase. The Ontario Power Authority conducted a study in April 2008, *Analysis of Future Offshore Wind Farm Development in Ontario*. The study found nearly 35,000 MW in 64 selected shallow water sites. At a minimum, we believe that the IESO should revisit the potential of wind in the Great Lakes. We believe that a comparison of cost, time to construct and environmental impact will favour offshore wind over nuclear. Of particular importance to the Toronto area is the replacement of the Portlands Energy Centre. We ask that you compare the time required for nuclear to replace the Portlands Energy Centre with the time required by Great Lakes wind in combination with storage.

TEECC supports the City of Toronto's submission regarding the July 10, 2025 seminar. We differ slightly in our approach to Thermal Energy Networks in that we believe that these networks can be successfully rolled out in existing neighbourhoods as well as in new developments.