Feedback Form

Regional Electricity Planning in Toronto – December 5, 2024

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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

Topic	Feedback
What feedback do you have regarding the draft electricity needs identified?	City staff are pleased to see the needs assessment begin to explore what future needs would be if the fossil fuel fired Portlands Energy Centre (PEC) is phased out of service by 2035, in accordance with the expressed preference of Toronto City Council (for example, 2024.MM.19.9). It is important that the needs arising in the PEC phase out scenario be seriously considered in the options assessment phase of the IRRP, given the lead time to consult on, design and deploy certain infrastructure or approaches necessary for meeting those needs. It would be a missed opportunity to treat those needs as something to only be robustly explored in future work that happens outside of, and subsequent to, the current IRRP process.
What feedback do you have regarding how to meet the electricity needs to inform upcoming milestones?	The IESO has expressed that certain technologies for meeting needs will not be assessed as part of this IRRP. This limits the ability of stakeholders and the public to have a full understanding of the opportunities, limitations, and tradeoffs involved with different technologies. For certain stakeholders, it may risk undermining the result of the IRRP. Regarding offshore wind in particular, the rationale for exclusion is that a current provincial moratorium exists. City staff believe that assessing the potential of offshore wind generation to meet future electricity needs in Toronto is: properly within scope of the IRRP, could have a material impact on the analysis of future options, and is not inconsistent with the existing moratorium given the stated basis for the moratorium is to enable scientific research on offshore wind. Offshore wind was included in the IESO's Pathways to Decarbonization study despite the moratorium. Finally, the moratorium is not legislated and could be lifted by Ontario at any point over the 20-year study period (2024-2044) the Toronto IRRP is meant to cover.
	City staff believe that the IRRP should robustly evaluate the potential for distributed energy resources (DERs) including but not limited to batteries (across all scales) and solar PV, to address identified needs. Research continues

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	to show that considered deployment of DERs can help address local electricity demand cost effectively when compared to new and upgraded traditional transmission and distribution infrastructure. For example, the IESO's own York Region Non-Wires Alternatives (NWAs) Demonstration pilot used real-world data to show the net benefit of using DERs as NWAs would generate significant system-wide savings (accounting for generation, transmission, distribution and DER procurement costs) in the 2030s, with the highest savings coming in a "high growth" scenario such as is expected in Toronto. The study also noted that prime areas for DERs are those with transmission or distribution constraints – a number of which have now been identified in Toronto as part of this IRRP process. In this context DERs have deployment benefits in that they have shorter development timelines than larger scale transmission and distribution infrastructure projects. Finally, to the extent non-emitting DERs can help provide the same sort of reliability support as fossil natural gas peaking plants do, they help to lower the GHG intensity of the grid and in turn support ambitious GHG reduction goals like Toronto's goal of net zero emissions by 2040. City staff express no position on the best model to deploy DERs locally to meet identified needs. However, City staff do express that any model should have an equity lens integrated to ensure that the benefits and opportunities of DER deployment are shared fairly across Toronto, consistent with the goal of the TransformTO Net Zero Strategy to support increased local contributions to the energy system in an equitable manner.
What additional information should be considered as we screen high-level potential options?	Information on expressed preferences of Toronto City Council should be considered as part of the community preferences criteria. City Council's preferences are evident in specific Council decisions as well as Council-adopted plans and strategies, such as the TransformTO Net Zero Strategy. For example, Council decisions 2024.MM19.9; 2023.MM6.13; 2021.IE26.16; 2019.MM10.3; and 2021.MM35.29 have relevance to the development of the IRRP by collectively supporting a future energy vision for Toronto that sees broad electrification of the buildings and transport sectors in Toronto, served by a clean, efficient grid that makes virtually no use of fossil natural gas

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	generation beyond 2035 and makes increasing use of local resources, including DERs. Additionally, information on relevant demographic characteristics of populations in areas of identified need (e.g. age, household income, etc) should be used to inform thinking around the equity aspects of solutions that have local impacts. For example, a high proportion of senior citizens in a distribution constrained area suggests that impacts on reliability could raise risks for seniors' ability to stay cool during times of extreme heat, a risk to which they are particularly vulnerable. Similarly, an area of relatively lower household income with identified need in the IRRP might benefit more greatly from a DER-focused solution that offers opportunity for savings at the customer household level.
What additional information should be provided in future engagements to help understand perspectives and insights?	Click or tap here to enter text.

Local Achievable Potential Study (LAPS)

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What feedback do you have on the scope that the IESO should consider?	The IESO should reconsider adding vehicle to grid (V2G) technologies in its scope. The evidence on potential contributions of V2G, while still developing at this point, nevertheless suggests a potentially material role when considered over the 20-year study period for this IRRP.
What feedback do you have on the methodology that the IESO should consider?	Click or tap here to enter text.
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

Wherever possible the IESO should make public the datasets that are utilized in the IRRP process. Open sharing of data will increase the quality of and confidence in the IRRP process, as well as enable the potential for further research and analysis by third parties on how to meet the electricity needs of Toronto. Given the fast-evolving nature of both needs and solutions in this space, enabling locally relevant research and analysis is likely beneficial.