Feedback Form

Regional Electricity Planning in Toronto Region – February 16, 2023

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 electricity planning webinar held on February 16, 2023, the Independent Electricity System Operator (IESO) is seeking feedback on the draft Scoping Assessment Outcome Report posted on the IESO's website. The draft report and webinar presentation, which provides an overview of these feedback requests, can be accessed from the engagement webpage.

- **Please submit feedback to** engagement@ieso.ca **by March 2, 2023**. If you wish to provide confidential feedback, please submit as a separate document, marked "Confidential". Otherwise, to promote transparency, feedback that is not marked "Confidential" will be posted on the engagement webpage.

Topic	Feedback
What additional information should be considered as part of the Scoping Assessment?	Future modelled extreme weather driven by climate change should be considered when specifying electrical components such as transformers and wires in order to ensure robustness and resiliency. • It is recognized that much of the specific equipment upgrades will need to be identified by local distribution companies (LDCs), however these organizations may need to be encouraged and supported in this work. • Rate applications by LDCs will need to include climate adaptation measures and these additional costs will need to be understood and approved by the Ontario Energy Board. • The LDCs' understanding and attention to climate adaptation could be facilitated by more attention by the IESO on these matters.
What other considerations should be made regarding the areas identified as requiring further study through a regional planning approach based on local developments?	Local planning initiatives at the Downsview Airport site and the Port Lands include the preparation of electricity demand studies and distributed energy resource analyses that should be considered as part of the demand forecasts and non-wires alternatives scenarios in the IRRP. • The Downsview demand study ("Demand Justification Report"), led by the major landowner in collaboration with Toronto Hydro and the City of Toronto, was completed in 2022. Analysis of opportunities for DERs is currently in-progress. • The Port Lands demand study and DER analysis will be led by the City of Toronto in collaboration with Toronto Hydro and Waterfront Toronto, and it is expected to be completed in Q4 2023-Q1 2024. Useful references regarding climate change vulnerability and adaptation include: • Toronto Hydro-Electric System Limited Climate Change Vulnerability Assessment (2015), which was conducted with staff support from the City of Toronto and Engineers Canada. It was supported financially by Natural Resources Canada (NRCan). • Also, with funding from NRCan, Electricity Canada undertook a three-year project from 2017 to 2020 to develop climate adaptation planning guidelines for electricity companies in Canada. The guidelines are recommended processes for utilities to follow when creating tailored company-specific adaptation plans.

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What other areas or specific considerations should be examined through regional planning?	Opportunities through the regional planning process to increase the short circuit capacity of Toronto Hydro's restricted feeders to facilitate DERs. • The Environment and Climate Division's SolarTO program supports residents and businesses with their decisions to install solar, including through a Solar map that allows users to automatically generate solar potential for their properties. • SolarTO has directly engaged with over 700 residents to conduct individual solar assessments and gather feedback. • Many residents have complained about being denied grid connection due to lack of short circuit capacity on feeders. Understanding risks of infrastructure system interdependencies and cascade failure is becoming increasingly important with the "triple threat" of increasing population, a large infrastructure state of good repair deficit and more frequent extreme weather. • Toronto's initial analysis of climate risks and interdependencies is briefly documented in a C40 Infrastructure Interdependencies + Climate Risk & Report in a cases study on page A-1, and a useful high-level diagram showing electrical system cascade failure concepts is found on page B-4. • With an aging population and more people living in densely populated high-rise communities, there is high dependency on many forms of infrastructure, many of which are dependent on electricity. • Tolerance to power disruption is changing, placing an even higher need for electrical systems to be robust and resilient to projections for future extreme weather conditions.

General Comments/Feedback

- Large post-secondary and healthcare institutions should be engaged as part of the IRRP, especially where decarbonization/electrification plans may have regional implications (e.g. University of Toronto, York University, Sick Kids, University Health Network)