To: IESO Engagement < engagement@ieso.ca >

Cc: mayor chow@toronto.ca

Subject: Toronto's electricity should come from affordable, renewable energy!

Dear members of the Technical Working Group,

As a Toronto resident, I am excited to hear you are working on **Toronto's next electricity plan, the Integrated Regional Resource Plan (IRRP).** This plan is a chance to fight rising electricity bills and local pollution while ensuring our City can thrive in the coming decades.

However, I am concerned that the plan will not fully realize the potential of renewable energy (including rooftop solar and offshore wind), storage, demand management and conservation measures to meet our needs. These options are more affordable than gas and nuclear and can save Ontario millions of dollars in avoided transmission costs. Local electricity generation using renewables can also improve Toronto's energy autonomy at a time when importing gas from the US is particularly risky and where climate disasters increase the vulnerability of systems that rely on long-distance transmission. Finally, these low-cost and clean options can support Toronto as it phases out the polluting Portlands Energy Center by 2035. Phasing out the Portlands Energy Centre is necessary for Toronto to meet its climate targets and protect residents' health.

Of course, as the largest city in Canada, Toronto will not meet its demand for power from within the city limits. Yet, for the reasons mentioned above, Toronto must meet as much of its own needs as it can.

Toronto's City Council requested that the Technical Working Group align the IRRP with the City's 2040 net-zero emissions target by phasing out the use of the Portlands Energy Centre except for extreme and exceptional circumstances, and rapidly increasing local renewable energy generation and energy efficiency.

I support this request and encourage the Technical Working Group to deliver an IRRP that makes the most of the following solutions:

- Energy efficiency and demand response. Toronto could meet at least a quarter of its additional electricity needs by 2035 with demand response programs that reduce demand and maximize energy efficiency upgrades to reduce energy waste from buildings.
- Rooftop solar. Toronto could phase out the need for Portlands Energy Centre by 2035 and meet at least 15 percent of its additional energy needs by covering half of its eligible rooftops with solar PV and pairing it with storage.

- Electricity storage. From utility-scale and residential batteries to innovative vehicle-to-grid systems, storage allows us to make the most of the non-emitting resources already on the grid and complements rooftop solar PV. Toronto's IRRP should aim for 1000 MW of storage by 2035.
- Renewable energy. Utility-scale wind and solar produce the cheapest form of
 electricity. If Toronto can not meet all its additional needs through efficiency and
 rooftop solar, it should be powered by low-cost and clean renewable energy. As part
 of this, it is time for Ontario to have a public discussion about whether or not we
 should tap the immense source of power offered by offshore wind in the Great
 Lakes.
- District heating and cooling systems that utilize Lake Ontario as a thermal storage source can significantly reduce electricity demand while minimizing the use of polluting gas-powered heating systems. By tapping into the lake's stable temperatures, these systems provide an efficient alternative to traditional heating and cooling methods. Toronto should invest in cost-effective district energy solutions.

Moreover, transparency is essential for Torontonians to understand and support their next electricity plan. If the Technical Working Group screens out some of the options above, it should provide a solid and defensible rationale as to why it did so.

I look forward to future opportunities to discuss Toronto's clean and affordable energy future.

Sincerely,

cc: Mayor Olivia Chow