

NORTHUMBERLAND BLUE DOT

Ms. Samantha Polito
Advisor, Regional and Community Engagement
Independent Electricity System Operator
Toronto, Ontario

Dear Ms. Polito:

In June 2024, Toronto City Council asked the IESO to develop an Integrated Regional Resource Plan (IRRP) to phase-out the Portlands' gas-fired power plant by 2035 (except for emergency back-up) and meet Toronto's future electricity needs with an integrated combination of energy efficiency and demand management and local renewable energy (e.g., rooftop and parking lot solar, Lake Ontario offshore wind power) and energy storage (e.g., stationary and EV batteries).

As the Ontario Clean Air Alliance (OCAA) has pointed out, the IESO, in their analysis, has neglected to include Lake Ontario off-shore wind and the use of Electric Vehicle (EV) batteries for storage through Vehicle-to-Grid Integration. By neglecting these resources, the IESO has concluded that the Portlands' gas plant cannot be phased out by 2035 and that Toronto's future electricity needs cannot be met using the integrated combination described above.

The OCAA makes a strong argument to include off-shore wind as part of the energy generation to meet Toronto's future needs. Off shore wind is a mature technology being used successfully in many countries and the study quoted by the OCAA indicates that it is 40% to 60% less expensive than new nuclear development. This source *must* be included in any reasonable cost comparison of ways to meet Toronto's future needs.

The 6.4 to 8.1 million electric vehicles expected to be on the road in Ontario by 2040 could provide 64,000 to 81,000 MW of electricity to the grid when needed using bi-directional chargers. While adoption of this technology may be in its early stages in 2025, it is already being used in the UK and France. It is highly likely that this technology will become common and well-accepted over the next 10-15 years. We, along with the OCAA, urge the IESO to take this into account when planning to meet future energy needs.

In conclusion, we wholeheartedly support the OCAA's recommendation:

Recommendation: The IESO should immediately evaluate the feasibility and cost-effectiveness of Lake Ontario offshore wind power and Vehicle-to-Grid (V2G) Integration to meet Toronto's growing electricity needs during the next twenty years in combination with energy efficiency, demand response, rooftop and parking lot solar, and stationary batteries.

Yours truly,

Bruce Bellaire

Faye McFarlane

On behalf of Blue Dot Northumberland