



July 21, 2023

Hon. Todd Smith, MPP, Minister of Energy

77 Grenville Ave., 10th Floor
Toronto, ON M5S 1B1
Canada

Dear Mr. Smith

The **Ontario Society of Professional Engineers (OSPE)** is the advocacy body and voice of the engineering profession in Ontario. Ontario currently has over 85,000 professional engineers, 250,000 engineering graduates, 6,600 engineering post-graduate students, and 37,000 engineering undergraduate students. Engineers are essential to the design and implementation of climate positive infrastructure, including nuclear technology.

OSPE applauds the Ministry on the recent release of the **Powering Ontario's Growth** plan and endorses the several initiatives outlined in the plan. In particular, we strongly believe the addition of three small modular reactors (SMRs) at the Darlington nuclear site and the consideration of a new large-scale nuclear station at the Bruce site, is a positive and necessary step in the right direction.

Investing in nuclear infrastructure in Canada is essential to meeting the demands of the predicted surge in Ontario's power demand over the coming years and tackling the climate crisis with an efficient and clean energy source. For this reason, OSPE advocates for the refurbishment of the **Pickering Nuclear Generating Station (GS)**.

The Province recently asked Ontario Power Generation (OPG) to conduct a feasibility assessment on the potential of refurbishing Units 5-8 of the Pickering Nuclear GS with a final recommendation to be submitted by the end of 2023. In 2009, refurbishment of these units was considered but not pursued due to stagnant electricity demand and supply chain issues. Electricity demand is now higher than ever in Ontario, and only predicted to rise. It is essential the Province reconsiders the refurbishment of Pickering in the context of new technologies and needs.

The refurbishment of Units 5-8 of Pickering will allow for their continued operation beyond 2025 and importantly, meet the demands of the site when Units 1 and 4 are retired at the end of 2024. The main benefits to the refurbishment of these units are:

- It is a **cost-effective option** to help meet electricity demand; the refurbishment of existing units is likely more cost effective than the construction of a new large-scale facility.
- The considerable **reduction of CO2 emissions** provided by the units, for example, 2.1 megatons in 2026 as opposed to fossil fuel power generation.
- Continued employment for **4500 workers**.
- **Ensuring the supply of Cobalt 60**, a critical medical isotope for which Pickering provides 20% of North America's supply (and 10% of the global supply).



We recognize that the Pickering Nuclear GS, as the oldest of Ontario's nuclear plants, is based on an older design than the newer Darlington and Bruce sites, however, an investment in the refurbishment and upgrade of Pickering is vital to ensure the Province has the capability to meet future demand, which will otherwise need to be met by fossil fuel power sources when the units are decommissioned. Ontario's current capability needs to increase by 2 to 2 ½ times by 2050 to accommodate the rise in demand, as revealed in last years Independent Electricity System Operator report. Pickering is becoming a forgotten, existing resource worthy of consideration in the push to plan for Ontario's future.

We applaud the government's demonstrated commitment to nuclear power, and also restate the importance of investment in nuclear as a resource that is unaffected by weather patterns, which become increasingly unpredictable. Nuclear power is effective independent of the availability of sun, wind or water supply. Investment in nuclear power, such as refurbishment of Pickering should also be seen as an opportunity to ensure job availability for those that may lose their jobs due to eventual decline in the fossil fuel industry. In fact, it is likely 'green' based job prospects will come to outnumber those produced by the fossil fuel industry.

Finally, we ask that the Minister engage with the Canadian Nuclear Safety Commission to support OPG in their request for approval to continue operating Pickering's Units 5 through 8 until the end of September 2026, which will otherwise be decommissioned at the end of 2025, and to strongly consider the case for the refurbishment of these units to allow for their continued operation well into the future.

Thank you for your consideration of our request. If you would like to discuss the matter further, please contact the Manager of Public Affairs, Paola Cetares at pcetares@ospe.on.ca or 416 223 9961 Ext. 225.

Sincerely,

A handwritten signature in black ink that reads "Stephanie Holko".

Stephanie Holko, P.Eng., MBA
Chair and President
Ontario Society of Professional Engineers

A handwritten signature in black ink that reads "Sandro Perruzza".

Sandro Perruzza
Chief Executive Officer
Ontario Society of Professional Engineers