



CMD 26-H7.16

Date: 2026-07-29

**Written Submission from
Conexus Nuclear Inc.**

**Mémoire de
Conexus Nuclear Inc.**

In the matter of

À l'égard de

Ontario Power Generation

Application to refurbish Pickering Nuclear
Generating Station and to renew licences
for the Pickering Nuclear Generating
Station and Waste Management Facility

Ontario Power Generation

Demande concernant la réfection de la
centrale nucléaire de Pickering et le
renouvellement de ses permis pour la
centrale et l'installation de gestion des
déchets

**Commission Public Hearing
Part 2**

**Audience publique de la Commission
Partie 2**

October 2026

Octobre 2026



July 29, 2026

Canadian Nuclear Safety Commission Secretariat
Canadian Nuclear Safety Commission
280 Slater Street, P.O. Box 1046
Ottawa, OM K1P 5S9
Email: interventions@cnsc-ccsn.gc.ca

Subject: Application from Ontario Power Generation to refurbish Pickering Nuclear Generating Station and to renew licences for the Pickering Nuclear Generating Station and the Pickering Waste Management Facility.

Conexus Nuclear Inc. (Conexus) formally supports Ontario Power Generation's (OPG) application to refurbish Units 5 to 8 and renew its licences. The refurbishment aims to ensure safe operation for the units for at least the next 30 years. Additionally, Conexus supports the decommissioning of Units 1 to 4 in accordance with the CNSC-approved Detailed Decommissioning Plan. Furthermore, we support consolidating the licensed activities currently authorized under the Pickering Waste Facility Operating Licence (WFOL) with those under the Pickering Nuclear Generating Station (NGS) Power Reactor Operating Licence (PROL). This consolidation will provide a comprehensive overview of generation and waste management for the station.

Since their commercial operations began in the early 1980s, the Pickering Nuclear Generating Station (NGS) Units 5 to 8 have consistently provided safe, clean, reliable, and affordable electricity to the people of Ontario. They have also produced Cobalt-60, a valuable radioisotope used in numerous industrial applications. By refurbishing Pickering NGS Units 5 to 8, OPG can ensure over 30 more years of safe operation, securing more than 2,100 MW of clean, emission-free electricity while responsibly managing this critical infrastructure.

Specifically, the planned refurbishment will include the following key scope of work:

- The Fuel Channel Assembly Replacement project to replace 760 feeder tubes and 380 fuel channel assemblies in each reactor.
- The Boiler Replacement project to remove and replace all 48 boilers across Units 5 to 8, with 12 boilers in each unit.
- The Turbine Generator project to replace and upgrade critical components to ensure reliable, efficient, and modernized operation, including the replacement of both high and low-pressure turbine spindles, as well as moisture separator and reheater systems.
- The Balance of Plant project to enhance both component and overall system reliability, and to support the extended operational life of the station, and
- The Facilities and Infrastructure project to construct new buildings, upgrade existing infrastructure, optimize space for personnel and materials, and enhance site logistics such as

- shuttle bus options and new parking lots, which is to be finished by the end of 2026 in preparation for the refurbishment.

In addition to the refurbishment activities, OPG plans to construct a deep-water intake structure during the licensing period. All of these activities will adhere to the high standards of environmental stewardship upheld by Pickering NGS, which includes implementing monitoring programs and performance measures to meet regulatory requirements.

Refurbishing Pickering NGS Units 5 to 8 will ensure more than 30 years of safe operation. This project will create numerous well-paying jobs in the community and provide many more years of safe, clean, reliable, and affordable electricity production. It will also support Canada's goal of achieving Net Zero emissions by 2050.

Conexus was formed in 1984, shortly after the Pickering station began operations, and one of its first projects supported improvements at the Pickering station. OPG is a founding member of Conexus Nuclear Inc., which includes all operators of CANDU reactors in Canada and internationally. Our mission is to achieve excellence through collaboration in CANDU technology, small modular reactors, and advanced nuclear technologies. Our members' foremost priority is nuclear safety. In partnership with members, suppliers, research institutions, and other organizations, Conexus continuously innovates nuclear plant equipment and processes to ensure the highest standards of safety, efficiency, and environmental performance.

Through Conexus, members invest around \$75 million each year in joint R&D aimed at improving the safety, reliability, and environmental performance of CANDU stations. Over the past several decades, PNGS has greatly benefited from the direct application of work facilitated by Conexus, which has supported the safe operation of its units.

In the areas of refurbishment and waste management, the Conexus Refurbishment Forum brings together representatives from various utilities to share lessons learned, best practices, and insights from their refurbishment activities. Meanwhile, the Conexus Waste Management and Decommissioning Peer Group has developed position papers focused on the processing, disposal, and storage of radioactive waste. These papers aim to foster alignment and a shared understanding within the industry while promoting the adoption of both domestic and international best practices. Additionally, the Conexus R&D program supports life extension and ongoing operations of the station, and has created tools and methodologies that help minimize, sort, segregate, and characterize radioactive waste. This work ensures that radioactive waste can be processed and disposed of in an environmentally responsible manner, in accordance with Canada's Policy for Radioactive Waste Management.

Through Conexus' network of peer teams, staff from nuclear utilities collaborate to enhance plant safety and operations. By sharing their experiences and developing common strategies, Conexus members support each other and help emerging nuclear utilities. Additionally, Conexus has established a leadership and knowledge management training program aimed at improving skills among high-potential technical managers in the nuclear industry.

In summary, Conexus fully supports OPG's application to refurbish Pickering NGS Units 5 to 8, as well as the decommissioning of Units 1 to 4 in accordance with the CNSC-approved Detailed Decommissioning Plan. Additionally, Conexus supports the request to renew and consolidate the licensed activities from separate licenses into a new, single Pickering PROL. Conexus and its members are committed to continuously improving safety, reliability, affordability, and environmental outcomes in Canada's nuclear plants, and we are confident that Pickering NGS and the PWMF will maintain their exemplary safety record across all aspects of their operations.

I look forward to elaborating on aspects of this letter during my oral presentation in October.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rachna', with a long, sweeping horizontal stroke extending to the right.

Rachna Clavero
President and CEO
Conexus