



**CMD 26-H7.28**

Date: 2026-08-11

**Written Submission from  
Kinectrics**

**Mémoire de  
Kinectrics**

In the matter of

À l'égard de

**Ontario Power Generation**

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

**Ontario Power Generation**

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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



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August 12, 2026

Commission Secretariat  
Canadian Nuclear Safety Commission  
280 Slater Street  
P.O. Box 1046, Station B  
Ottawa, Ontario  
K1P 5S9

**Public Hearing on Ontario Power Generation's Application to Refurbish Pickering Nuclear Generating Station and to Renew Licences for the Pickering Nuclear Generating Station and Waste Management Facility**

Dear Commission Secretariat,

The purpose of this letter is to express Kinectrics' support for Ontario Power Generation's (OPG's) application to refurbish the Pickering Nuclear Generating Station (PNGS) and to renew the licences for the PNGS and Pickering Waste Management Facility (PWMF).

Kinectrics is a proudly Canadian company committed to supporting the safe, reliable, and sustainable generation of electricity in Canada and internationally. We provide complete life cycle management solutions to the electricity industry, supporting the deployment, licensing, and continued safe operation of nuclear generating facilities, working with our customers to fight climate change and save lives through clean electricity generation and medical isotope production.

Our headquarters are in Etobicoke, Ontario with offices in Pickering, downtown Toronto, Bruce County, and internationally, including the United States, Germany, Denmark, Romania, the United Kingdom, and India. We operate over 30 laboratories, including Canadian Nuclear Safety Commission-licensed nuclear facilities, and employ more than 1,300 staff, approximately 70% of whom have technical, science or engineering degrees.

Kinectrics is committed to the safe operation of nuclear generating stations in Canada and around the world. We share OPG's vision that continued operation of the PNGS will have many benefits to the province, economy, and environment, including reducing CO<sub>2</sub> emissions, extending the need for skilled jobs, and ensuring a stable supply of medical isotopes. Kinectrics is supported by over 100 companies and consultants on our Approved Suppliers List. Combined with our suppliers, Kinectrics' support of OPG contributes to the employment of thousands of high-quality, knowledge-based jobs.



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Kinectrics provides a broad range of services to OPG which contribute to the continued safe operation of OPG stations and has undertaken several projects to support the continued operation of the PNGS. These projects include:

- Completing a Periodic Safety Review (PSR) to support the life extension of PNGS Units 5 to 8. This work includes preparation of the PSR Basis Document, Safety Factor Reports, Global Assessment Report, and an Integrated Implementation Plan for the implementation of safety enhancements. To date, the PSR Basis Document and Safety Factor Reports have been completed. Work on the Global Assessment Report and Integrated Implementation Plan is currently in progress.
- Completed safety analysis to support design options related to the mitigation of containment overpressure during multi-unit Beyond Design Basis Accidents (BDBAs).
- Updated Probabilistic Safety Assessments (PSAs) to ensure that the PSA models accurately reflect the current design and operation of PNGS Units 5 to 8, including Level 1 and 2 Internal Events At-Power and Outage Internal Events PSAs, Seismic PSA, Internal Flood PSA, and High Wind PSA.
- Supported PNGS Units 5 to 8 refurbishment planning by using the PNGS Units 5 to 8 PSAs to support risk-informed decision-making related to the identification of potential Safety Improvement Opportunities (SIOs), the review of other plant design modifications, and the assessment of changes associated with the Safe Storage configuration of PNGS Units 1 and 4. This PSA work is being used to determine opportunities to be potentially pursued to improve the safety of PNGS post-refurbishment, as indicated by Severe Core Damage Frequency (SCDF) and Large Release Frequency (LRF) values.
- Proposed a plan for the completion of PSA work required to support PNGS Units 5 to 8 refurbishment. The plan includes interim PSA updates prior to Unit 5 Return to Service (RTS) to reflect the actual status of plant design changes and the expected schedule of unit restarts. This is to be followed by a full-scope PSA update to reflect the post-refurbishment configuration of PNGS Units 5 to 8.
  - The development of a seismic PSA for PNGS Units 5 to 8 and the update of the PNGS Units 5 to 8 hazards screening and hydrological and flood hazard assessments are currently in progress.
- Supported the following PNGS design projects:
  - Conceptual and Preliminary Design for Pickering Refurbishment Balance of Plant Modification Definition Packages;
  - Vacuum Building Dousing System Fiberglass-Reinforced Plastic Replacement;



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- Isolation of Unit 1 and Unit 4 from the Negative Pressure Containment System (PNGS Units 1 to 4 Safe Storage);
- Installation of Auxiliary Pressure Relief Valve and Air Addition Valve;
- Electrical Separation to ensure that post-refurbishment operation of PNGS Units 5 to 8 is independent of the Safe Storage configuration for Units 1 to 4;
- Development of a new PNGS Units 1 to 4 Monitoring System; and
- PNGS Units 5 to 8 Digital Control Computer (DCC) Replacement
- Completed Safety Assessments for the Pickering Component Storage Structure at the PWMF. These assessments involved Normal Operation, Malfunction/Accidents, and ALARA assessments.
- Completed additional shielding analysis for the Pickering Component Storage Structure.
- Completed Dose Rate and Safety Assessment for the PWMF Storage Building 5.

In providing these services to OPG, Kinectrics' staff interfaced with OPG staff where we have developed long-standing working relationships. Kinectrics has observed the high degree of attention to detail and rigor that OPG staff have exercised and is confident that a comprehensive and robust basis has been provided to support continued operation of the PNGS and PWMF for the requested 10 year licence renewal.

Kinectrics and OPG are proud members of the Canadian Council for Indigenous Business (CCIB), which aims to strengthen the relationship between Indigenous and non-Indigenous peoples, businesses, and communities. In this regard, we recognize and support OPG's demonstrated commitment to ongoing engagement with Indigenous peoples and to further Indigenous business involvement in the supply chain. OPG created an Indigenous Opportunities Network (ION) designed to increase the number of Indigenous people working in the nuclear industry by placing them in the building trades on some of OPG's most diverse and innovative projects. OPG also prepared a Reconciliation Action Plan which functions as a road map for OPG to work in partnership with Indigenous communities, businesses, and organizations to advance reconciliation, and OPG has made meaningful progress on the plan. Kinectrics shares OPG's commitment to reconciliation and meaningful engagement with Indigenous peoples.

We actively work with Indigenous businesses and Indigenous communities in the regions in which we operate, and we support initiatives that foster Indigenous participation, capacity building, and long-term economic opportunity within the nuclear supply chain.



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In summary, by working closely with OPG and understanding their people, programs, procedures, processes, and safety culture, Kinectrics has observed the commitment to safety and attention to detail which are applied to all OPG projects. Based on these experiences, Kinectrics is confident that OPG has undertaken a rigorous, systematic evaluation to demonstrate that the PNGS and PWMF can continue to operate safely and reliably.

On this basis, we support the approval of OPG's application to refurbish the PNGS and renew the licences for the PNGS and PWMF.

Sincerely,

John D'Angelo  
2026.08.11 08:45:28  
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John D'Angelo  
President  
Kinectrics Inc.