



Supplementary Information

Renseignements supplémentaires

Oral presentation

Exposé oral

Presentation from Kinectrics

Présentation de Kinectrics

In the Matter of the

À l'égard d'

Ontario Power Generation Inc.

Ontario Power Generation Inc.

Application to extend the operation of
Pickering Nuclear Generating Station
Units 5 to 8 until December 31, 2026

Demande visant à prolonger l'exploitation
des tranches 5 à 8 de la centrale nucléaire de
Pickering jusqu'au 31 décembre 2026

Commission Public Hearing

Audience publique de la Commission

June 2024

Juin 2024



KINECTRICS

**Kinectrics' Support for Ontario Power Generation's Request for
Authorization to Operate Pickering Nuclear Generating Station
Units 5 to 8 to December 31, 2026**

**Intervention to the Canadian Nuclear Safety Commission
June 20, 2024**

Sean Donnelly, P.Eng. - Senior Director, Licensing & Advanced Reactors



KINECTRICS

[Company Video](#)

Who We Are

Kinectrics is a trusted global provider of electricity lifecycle services

We deliver innovative solutions that help to sustainably power a clean energy future.

Serving distinct global markets:

Nuclear + T&D

70+ Complete range of services across:

T&D Field Services & Testing
PPE Testing & Servicing
Design & Engineering
Business & Project Management
Nuclear Safety & Licensing
Lifecycle Management
Nuclear Outage & Site Support

Nuclear Equipment Development & Supply
Materials & Nuclear Component Testing
Forensic & Failure Analysis
Chemistry & Assaying
Radioactive Waste Management
Medical Isotopes

People



~1300 highly technical staff

Facilities



Over 30+ unique laboratories

Customer



High satisfaction rating

Our People & Growth

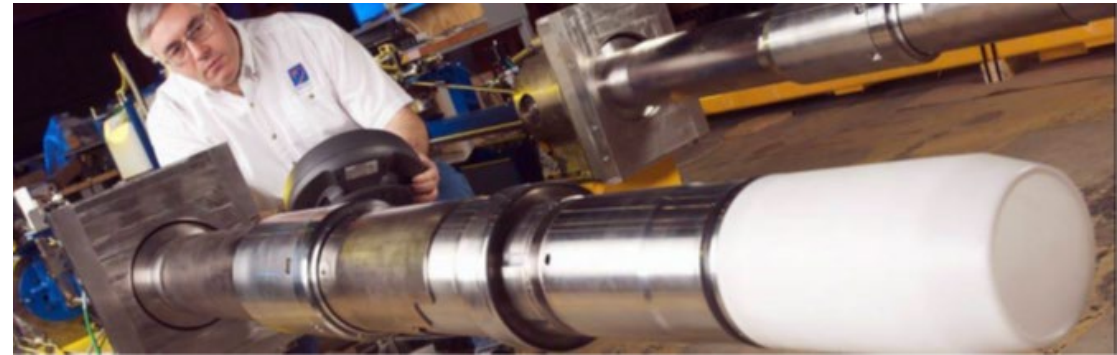
We are a growing global company. We work alongside the brightest technical experts.



Safety is our Culture | Quality is our Promise

What We Do

- Kinectrics supports the electricity industry with life cycle asset management services, ensuring the safe and reliable operation of assets including nuclear power plants.
- Our 1,300+ highly qualified staff conduct work for nuclear utilities and technology developers in areas including:
 - Design engineering and project management.
 - Development and deployment of specialized tools, manual and robotic, to inspect the reactor core and station infrastructure for signs of fatigue, wear, and/or residue.
 - Fuel channel fitness-for-service evaluations, and other asset management services for safety-related equipment and systems.
 - Undertaking of deterministic and probabilistic safety assessments in support of the design and licensing bases.
 - Provision and qualification of safety-related components where the original equipment manufacturer no longer fabricates to the necessary nuclear quality assurance standards.



Statement of Support

Kinectrics shares OPG's vision that continued operation of Pickering NGS Units 5 to 8 to the end of 2026 will have many benefits to the province, economy, and environment, including reducing CO₂ emissions, extending the need for skilled jobs, and ensuring a stable supply of the Cobalt-60 medical isotope.

- In providing services to OPG, Kinectrics' staff interfaced with OPG staff where we have developed long-standing working relationships and observed the high level of attention and rigor that OPG staff have exercised.
- 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, long-term jobs.

Relevant Projects to Extended Operation of Pickering NGS Units 5-8

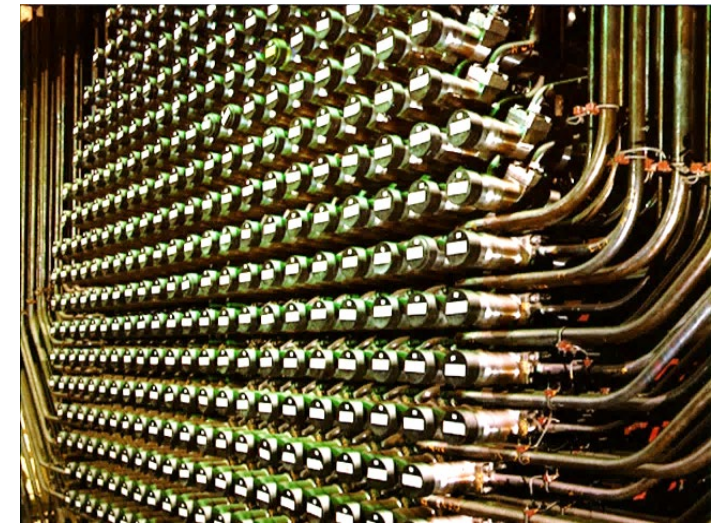
- Completion of amendments to the previous Periodic Safety Review (PSR2) that was used as input to obtain existing approvals for commercial operation of Pickering NGS until the end of 2024. These amendments correspond to PSR2-A and PSR2-B:
 - PSR2-A focused on demonstrating the acceptability of extending Pickering NGS Units 5-8 commercial operation until the end of 2025.
 - PSR2-B focused on demonstrating the acceptability of extending Pickering NGS Units 5-8 commercial operation from the end of 2025 until the end of 2026.
- PSR2-A and PSR2-B followed a common methodology, which consisted of the following key steps:
 - Reassessing the results of the PSR2 global assessment in the PSR2 Global Assessment Report.
 - Evaluating new or revised requirements, expectations, and practices since PSR2 was completed.
 - Formulating new global issues and resolution plans for newly identified findings.
 - Evaluating the continued validity of PSR2 conclusions.
 - Revising the Integrated Implementation Plan to incorporate the results of the reassessment.

Relevant Projects to Extended Operation of Pickering NGS Units 5-8

- Completion of an aging management review in support of PSR2-B. The scope of this project included reviewing 495 Component Condition Assessment Reports to ensure appropriate aging management practices were in place to support safe and reliable commercial operation of Pickering NGS Units 5-8 until the end of 2026.
- Updating Pickering NGS Units 5 to 8 safety analysis for Loss of Flow, Small Break Loss of Coolant Accident, and Loss of Reactor Power Regulation events to demonstrate there is sufficient margin to applicable acceptance criteria to support commercial operation until the end of 2026.

Relevant Projects to Extended Operation of Pickering NGS Units 5-8

- Completing or contributing to several key evaluations and initiatives demonstrating Pickering NGS Units 5 to 8 fuel channel fitness for service for commercial operation until the end of 2026, including:
 - Development of modernized and code-compliant computer software for probabilistically demonstrating core integrity for pressure tube flaws, fracture protection and leak-before-break.
 - Demonstration of acceptability of core wide fuel channel integrity for pressure tube flaws, fracture protection and leak-before-break to beyond the planned end of commercial life.
 - Disposition of all pressure tube dimensional, volumetric and hydrogen isotope concentration inspection findings, to beyond the planned end of commercial life.



OPG and Indigenous Relations

Kinectrics is committed to maintaining positive and respectful, mutually beneficial relationships with Indigenous communities and groups in the past and present traditional territories where we operate.

- Kinectrics is a proud member of the Canadian Council for Aboriginal Business (CCAB) which aims to strengthen the relationship between Indigenous and non-Indigenous peoples, businesses, and communities.
- We are pleased to work with OPG, which is also a member of the CCAB and has demonstrated a strong commitment to Indigenous peoples through initiatives such as:
 - Creation of an Indigenous Opportunities Network (ION)
 - Preparation of a Reconciliation Action Plan
- OPG has demonstrated a commitment to building and growing long-term, mutually beneficial working relationships with Indigenous communities.





KINECTRICS

Summary

- By working closely with OPG over many years and understanding their people, programs, procedures, processes and safety culture, we are confident that OPG has undertaken a rigorous, systematic evaluation to demonstrate that Pickering NGS Units 5 to 8 can continue to operate safely and reliably until December 31, 2026.
- On this basis, we support OPG's request for authorization to operate Pickering NGS Units 5 to 8 to December 31, 2026.





KINECTRICS

www.kinectrics.com

 /KINECTRICS

 /KINECTRICS

 @KINECTRICS