



CMD 25-H2.49

Date: 2025-05-08

**Written Submission from
Kinectrics Inc.**

**Mémoire de
Kinectrics Inc.**

In the matter of the

À l'égard d'

Ontario Power Generation Inc.

Application to renew power reactor
operating licence for the Darlington
Nuclear Generating Station

Ontario Power Generation Inc.

Demande concernant le renouvellement
du permis d'exploitation d'un réacteur de
puissance pour la centrale nucléaire de
Darlington

**Commission Public Hearing
Part-2**

**Audience publique de la Commission
Partie-2**

June 24-26, 2025

24-26 juin 2025



Telephone: 416.207.6511
E-mail: david.harris@kinectrics.com

May 8, 2025

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 Renew its Power Reactor Operating Licence for the Darlington Nuclear Generating Station

Dear Commission Secretariat,

The purpose of this letter is to express Kinectrics' support for Ontario Power Generation's (OPG's) application to renew its Power Reactor Operating Licence (PROL) for the Darlington Nuclear Generating Station (DNGS).

Kinectrics is a proudly Canadian company committed to sustainable, long-term global growth. We provide complete life cycle management solutions to the electricity industry, 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, the United States, Germany, Denmark, Romania, the United Kingdom, and India. We operate over 30 laboratories including CNSC-licensed nuclear facilities and employ more than 1,300 staff, 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 DNGS 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 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.



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 DNGS. These projects include:

- Supported the completion of a Periodic Safety Review (PSR) to confirm the design, condition and operation of the DNGS supports continuing commercial operation from 2025 to 2035, which included a PSR Basis Document, Safety Factor Reports, a Global Assessment Report and an Integrated Implementation Plan for the implementation of safety enhancements.
- Supported the following DNGS Refurbishment projects:
 - Refurbishment Design Replication;
 - Primary Heat Transport Liquid Relief Valve Replacement Modification;
 - Addition of Unit 2 Auxiliary Shutdown Cooling Pumps;
 - Reduced Pressure Temperature Envelope Modifications: Emergency Coolant Injection Setpoint Changes;
 - Hydrogen Cooling Temperature Control Valve Control System Re-Design; and
 - Shutdown Cooling Heat Exchanger Replacement.
- Performing a climate change resilience assessment to assess all the DNGS Structures, Systems, and Components for their potential vulnerability to the impacts of climate change and identification of strategies to mitigate these potential vulnerabilities.
- Updating Probabilistic Safety Assessments (PSAs), to ensure that the PSA models accurately reflect the current design and operation of the DNGS, including Level 1 and 2 Internal Events At-Power and Outage Internal Events PSAs, Seismic PSA, High Wind PSA and Fire PSA.

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 DNGS for the requested 30 years. Canada has a well-established regulatory framework that can support a 30-year operating licence. Additionally, the comprehensive PSR process and the strong operating history at the DNGS further support a 30-year operating licence.



Kinectrics is a proud member 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 are pleased to work with OPG, which is also a member of the CCIB and has demonstrated a strong commitment to work towards meaningful 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 views in this pursuit and is actively working with Indigenous businesses and Indigenous communities in the regions in which we operate.

In summary, by working closely with OPG over many years 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 DNGS can continue to operate safely and reliably.

On this basis, we support the approval of OPG's application to renew its PROL for the DNGS. If you have any questions or require clarification, please do not hesitate to contact me at 416.207.6511 or david.harris@kinectrics.com.

Sincerely,

David Harris
President and CEO
Kinectrics Inc.