



CMD 25-H2.61

Date: 2025-05-08

**Written Submission from the  
Canadian Nuclear Laboratories**

**Mémoire des  
Laboratoires Nucléaires Canadiens**

In the matter of the

À l'égard d'

**Ontario Power Generation Inc.**

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

**Ontario Power Generation Inc.**

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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

2025 May 8

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

Dear Commission Registry,

**CNL INTERVENTION IN SUPPORT OF OPG'S APPLICATION FOR RENEWAL OF THE DARLINGTON  
NUCLEAR GENERATING STATION POWER REACTOR OPERATING LICENCE**

On behalf of Canadian Nuclear Laboratories (CNL), I am writing to voice our strong support for Ontario Power Generation's (OPG) application to renew the Darlington Nuclear Generating Station (NGS) Power Reactor Operating Licence for a 30-year period. We respectfully request that this intervention be considered in your deliberations on the application.

For decades here in Ontario, the Darlington NGS has produced safe, reliable and virtually carbon-free energy, minimizing Canadian greenhouse gas emissions, while providing Ontario businesses and communities with 20% of its electricity. This is in addition to the support it provides to the radioisotope industry in both the medical and food safety fields, which directly benefit from the reliability of Darlington NGS reactor operations.

With Ontario's electricity demand projected to increase by 75 per cent in the next 25 years, according to Ontario's Independent Electricity System Operator, the need for the type of dependable, clean energy that is currently generated by Darlington is only going to grow. Simply put, Ontario – and Canada more broadly – needs Darlington NGS for years to come.

Thankfully, Darlington NGS has distinguished itself as a top performing nuclear power plant, with more than three decades of operating experience. Internationally, it has been recognized six times by the World Association of Nuclear Operators (WANO) for performing to exceptionally high levels of safety, operational performance and equipment reliability. And, throughout its most recent licence period, Darlington NGS maintained an exceptional safety record that demonstrates OPG's commitment to the production of reliable, clean energy while protecting the public, the environment, and its employees.

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In operating the Darlington NGS, OPG has also fulfilled all the necessary regulatory commitments set out by the CNSC. This past licence term, OPG received the Electricity Canada President's Award of Excellence for Employee Safety Generation nine times in the last 10 years. The award recognizes OPG's achievement of being in the top quartile for both total recordable injury frequency and lost time injury severity rates. And as a company that pursues continuous improvement, these accomplishments did not stop OPG from pursuing additional improvements during the period, including notable enhancements in Fuel Handling Reliability, Work Protection and Equipment Reliability.

Through decades of collaboration, CNL knows OPG as a responsible member of the nuclear sector, an organization that places an emphasis on safe operations and is dedicated to the health and well-being of the Canadian public, its workers, and the environment. OPG has established a strong safety culture at Darlington, with a clear focus on operational excellence, the use of international best practises and a recognition of the importance of operating experience.

Given their exceptional track record in safe operations, the essential role that the Darlington Nuclear Station plays in electricity generation and isotope production in Ontario, and the many economic, financial and environmental benefits to Ontario taxpayers – particularly in the battle against climate change – CNL offers its full support to OPG for this licence application.

If you require any further information, please contact CNL's Chief Regulatory Officer, Sarah Brewer at 613-633-8271.

Thank you for your consideration.

Sincerely,



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