



CMD 25-H2.13

Date: 2025-05-02

**Written Submission from
Calian**

**Mémoire de
Calian**

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



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May 1, 2025

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

Re: Ontario Power Generation's Darlington Nuclear Generating Station (NGS) Power Reactor Operating Licence (PROL) renewal application

Dear Commission Secretariat,

I am writing on behalf of Calian in support of Ontario Power Generation's (OPG) Darlington Nuclear Generating Station (DNGS) Power Reactor Operating Licence (PROL) renewal application.

For over 25 years, Calian Nuclear has helped to ensure the safety and security of Canada's nuclear infrastructure through participation in hundreds of projects serving the nuclear industry. Our team offers a range of services related to environmental protection, impact assessments, licensing, safety analysis, engineering, emergency preparedness, waste management, and decommissioning. Calian Nuclear provides a full-cycle approach to safety and security critical domains, as demonstrated by our involvement in research and development, regulatory compliance, operations, emergency planning and preparedness, and training and exercises.

Calian Nuclear was contracted by OPG to manage the planning, design, conduct, and evaluation of the next full scale nuclear exercise for DNGS. Titled "Exercise Unified Command 2025", this exercise is scheduled to take place October 22-23, 2025, at various locations across Ontario. Calian Nuclear has unparalleled experience in the development and conduct of nuclear emergency response (NER) exercises and evaluations. This includes years of assisting organizations such as OPG as well as off-site response partners in the development and evaluation of interoperability exercises. As such, we have extensive knowledge of OPG's organizational culture and their commitment to operational excellence in support of their licencing program.

In addition to NER exercises, Calian Nuclear has played a key role in maintaining the highest standards for Darlington's Probabilistic Safety Assessment (PSA). In 2024, Calian Nuclear was contracted by OPG to update the Hazard Screening Analysis, a foundational component of the PSA framework. This update ensured compliance with the Canadian Nuclear Safety

Commission's (CNSC) regulatory document REGDOC-2.4.2, Version 2, *Probabilistic Safety Assessment (PSA) for Reactor Facilities*, and aligns the analysis with current international best practices. This work was essential to the licence renewal process. This proactive approach to risk assessment directly supports OPG's continued safe operation of the facility and strengthens public and regulatory confidence in the long-term reliability of nuclear energy at Darlington.

In summary, our collaboration with OPG has reinforced Calian Nuclear's confidence in OPG's ability to operate with the highest standards of safety, reliability, and environmental responsibility. As a trusted partner supporting Canada's nuclear industry for over two decades, Calian Nuclear has had the opportunity to support OPG in critical initiatives that contribute to the safe and effective operation of its nuclear facilities.

Through our partnership, OPG consistently demonstrates a commitment to nuclear safety culture, continuous improvement, regulatory compliance, and operational excellence. This approach not only supports the delivery of clean, stable electricity to millions of Ontarians but also advances the broader provincial and national goals for reducing greenhouse gas emissions and achieving net-zero targets.

The renewal of the PROL is a critical step in ensuring OPG can continue to provide this essential energy source while maintaining its rigorous focus on safety, innovation, and environmental stewardship. Calian Nuclear fully supports this important application and remains committed to supporting OPG and the Canadian nuclear industry as we collectively work toward a sustainable energy future.

Sincerely,

A handwritten signature in black ink that reads "Hani Al Anid". The signature is written in a cursive, flowing style.

Dr. Hani Al Anid
Vice President, Nuclear
Calian Ltd.