



**Final submission from  
CANDU Owners Group Inc.**

**Mémoire définitif de  
CANDU Owners Group Inc.**

In the Matter of the

À l'égard des

**Canadian Nuclear Laboratories (CNL)**

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**Laboratoires Nucléaires Canadiens (LNC)**

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Application from the CNL to amend its Chalk River Laboratories site licence to authorize the construction of a near surface disposal facility

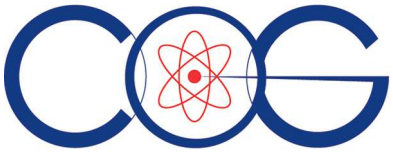
Demande des LNC visant à modifier le permis du site des Laboratoires de Chalk River pour autoriser la construction d'une installation de gestion des déchets près de la surface

**Commission Public Hearing  
Part 2**

**Audience publique de la Commission  
Partie 2**

**May and June 2022**

**Mai et juin 2022**



May 12, 2023

Canadian Nuclear Safety Commission Secretariat  
c/o Louise Levert  
Canadian Nuclear Safety Commission  
280 Slater Street, P.O. Box 1046  
Ottawa, ON K1P 5S9  
Email: [nsc.interventions.ccsn@canada.ca](mailto:nsc.interventions.ccsn@canada.ca)

**Subject:** Canadian Nuclear Laboratories (CNL) Near Surface Disposal Facility (NSDF), Ref. 2022-H-07

Dear Ms. Levert,

I am writing on behalf of the CANDU Owners Group (COG) in support of CNL's application to amend its Chalk River Laboratories site licence to authorize the construction of a Near Surface Disposal Facility (NSDF).

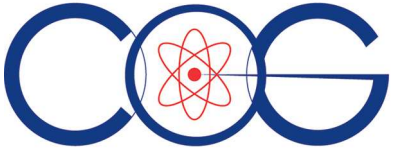
The NSDF is essential to addressing the legacy waste at the Chalk River Laboratories site. While existing waste is safely contained in systems that protect workers, the public, and the environment, there is a need to take action now. The Government of Canada is committed to cleaning up historical radioactive waste around the country. A modern, operational disposal facility for low-level waste at CNL will go a long way to fulfilling that commitment while avoiding the need for additional temporary storage, which is neither sustainable nor financially responsible.

#### **Benefits of licence amendment**

CNL is a world leader in developing peaceful and innovative applications from nuclear technology through its expertise in physics, metallurgy, chemistry, biology, and engineering. They are committed to ensuring that Canadians and the world receive energy, health, and environmental benefits from nuclear science and technology with the confidence that nuclear safety and security are assured. The proposed NSDF represents a permanent solution to reduce environmental risk and isolate low-level radioactive waste, in accordance with international guidance and regulatory requirements.

Building the NSDF closes the loop on the lifecycle of nuclear waste. It is a permanent solution to Canada's ongoing challenge of where to store its low-level waste, and the engineered containment mound is internationally recognized as the best practice for radioactive waste disposal. Designed to withstand extreme weather and events such as earthquakes, tornadoes, forest fires, major storms, and sabotage, the facility is safe and secure.

The NSDF will enable CNL to revitalize their Chalk River Laboratories to advance clean energy technology and contribute to medical breakthroughs. The site is a unique source of nuclear science in Canada, producing research in health science and making advances in clean, non-carbon energy to combat climate change and support Canada's goals of a net-zero future.



*"Excellence Through Collaboration"*

### **Collaboration through the CANDU Owners Group**

This submission speaks to some of CNL's efforts to continuously strengthen the nuclear industry through its leadership in collaborative efforts. In particular, I will speak to those undertaken in collaboration with other members through COG.

COG is a not-for-profit organization with membership from all CANDU operators both in Canada and internationally. Our mission is "To improve the performance of CANDU stations worldwide through member collaboration" with a vision to create excellence.

To fulfill this mission and vision, COG is organized around the following four operational program areas:

- Nuclear Safety and Environmental Affairs
- Research and Development
- Information Exchange and Knowledge Management
- Joint Projects

COG members spend approximately \$75 million a year in R&D and Joint Projects to strengthen the safety, reliability, environmental, and cost performance of the CANDU nuclear plants.

The work facilitated by COG on behalf of its members relies on capable, knowledgeable, suppliers with deep expertise, human capacity, and facilities to undertake ground-breaking nuclear science. This research, and the associated engineering activity, is undertaken mostly in Canada by organizations such as Canadian Nuclear Laboratories.

Further, CNL employees play a significant role in our programs. They share their expertise with others and contribute or play a lead role in all COG program areas.

Key results achieved and enhanced through the full involvement of CNL employees in collaboration with other COG members, via COG, include: CANDU fuel design, advanced fuel design, used fuel inspections, development, verification and validation of fuel, thermal-hydraulics, containment, and reactor physics computer codes, passive autocatalytic recombiners, hydrogen research, in-vessel retention experiments, radiopharmaceutical development and testing, low dose radiation research, emergency preparedness, cybersecurity, environmental remediation and clean energy amongst many others.

Finally, I would like to restate the urgency of moving forward with this facility, for the benefit of workers, the public, and the environment, and to enable CNL to clean up the CRL campus and continue to make key advances in nuclear science and technology, reflecting the interests of Canadians both today and into the future.

Sincerely,

A handwritten signature in black ink, appearing to read 'Rachna Clavero', written in a cursive style.

Rachna Clavero  
President and CEO  
CANDU Owners Group