



**Final submission from the  
North American Young Generation  
in Nuclear**

**Mémoire définitif de la  
North American Young Generation  
in Nuclear**

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**

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

Tuesday May 30<sup>th</sup>, 2023

Subject: Canadian Nuclear Laboratories' application to amend its Chalk River Laboratories site licence to authorize the construction of a near surface disposal facility IAA Reference Number: 80122

Dear Secretariat:

My name is Matthew Mairinger and my background is in Nuclear Engineering. I have held various positions at Ontario Power Generation, including two years in Nuclear Sustainability Services. I am the incoming President of the continental non-profit organization NAYGN (North American Young Generation in Nuclear). I wish to submit my comments in full support of the construction of a Near Surface Disposal Facility on the Chalk River Laboratories site.

First, I would like to recommend this project based on the safety features – it is being designed to withstand extreme weather events and the engineered containment mound is internationally recognized as a best practice for low-level radioactive waste disposal. I am also impressed with the rigorous testing which has taken place at Queen's University. Over the years I have heard opposition to this project based on concerns regarding the Ottawa River so I am again pleased to see the siting will be on a bedrock ridge, the NSDF will feature an advanced waste water treatment system, and the facility is 50m above the Ottawa River (which is higher than any flood waters that may occur).

Second, I would like to recommend this project as it provides a long-term solution to Canada's problem of where to store its low-level waste. Organizations such as the International Energy Agency (IEA) and the Organisation for Economic Co-operation and Development Nuclear Energy Agency (OECD NEA) have stated we will need to double or triple global nuclear capacity if we have any chance of meeting our net zero goals. One barrier to achieving these goals is the public misconception around radioactive waste, and in particular, the argument that there is no long-term solution. Therefore, from an environmental and climate change perspective I am thrilled to support this Disposal Facility as it provides that long-term disposal solution.

Millions a year are dying prematurely due to the burning of fossil fuels and carbon emissions are consistently rising each year, so I just want to stress the urgency of the situation we face and that we need projects like the NSDF to go forward to start to improve the environment we live in.

I'd like to thank you for providing the opportunity to intervene on this matter.

Matthew Mairinger, PMP, P. Eng.