



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

**Mémoire de
CANDU Owners Group Inc.**

In the Matter of

À l'égard de

McMaster University

Université McMaster

Application to renew its McMaster Nuclear
Reactor Class IA non-power reactor operating
licence

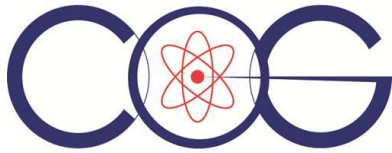
Demande concernant le renouvellement de son
permis d'exploitation d'un réacteur de catégorie
IA non producteur de puissance pour le réacteur
nucléaire McMaster

Public Hearing - Hearing in writing based on
written submissions

Audience publique - Audience fondée sur des
mémoires

April 2024

Avril 2024



March 11, 2024

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: interventions@cnsccsn.gc.ca

Subject: McMaster University Research Reactor Licence Renewal (#NPROL-01).

Dear Ms. Levert,

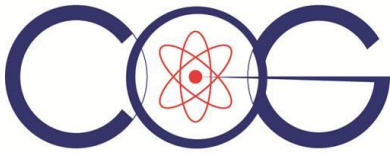
This submission is in support of the McMaster University Research Reactor Licence Renewal.

The CANDU Owners Group (COG) is a not-for-profit organization with membership from all owners of CANDU reactors in Canada and internationally. COG's vision is excellence through collaboration for CANDU and advanced nuclear technologies. Together with its members, suppliers, researchers, and partner organizations, COG is continuously innovating nuclear technology and processes to ensure the highest standard of safety, efficiency, and environmental performance.

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 research. In Canada, this fundamental research is undertaken mostly by our suppliers that hold world-class laboratories and facilities such as Canadian Nuclear Laboratories, Kinectrics and STERN Laboratories, as well as our Canadian universities. We leverage our programs to create avenues to support the pipeline of talent coming into the nuclear sector through collaborative projects and investments in Research Chairs at the universities.

Located at McMaster University, the McMaster Nuclear Reactor (MNR) has been operational since 1959, and in the past 64 years, its end use as a multi-purpose research facility has propelled McMaster University to become one of Canada's prominent Nuclear Universities. Its suite of nuclear facilities is one-of-a-kind in an educational institution setting.

The MNR is a leader in the production of radioisotopes such as Iodine-125, an isotope used in the treatment of prostate cancer, with 70,000 treatments a year being shipped around the world. Most recently, it manufactured and packaged its first patient dose of Holmium-166 for liver cancer treatment trials. The MNR is also a world leader in neutron beam irradiation experiments leading the way in the R&D of new materials and technology. Every year, it conducts hundreds of thousands of neutron irradiations in support of the Canadian industry, from analysis of environmental samples and mining exploration to aerospace part qualifications.



In addition, as an active contributor to the Federal government's Small Modular Reactor (SMR) Action Plan, McMaster University has proven itself to be a leader in SMR research, demonstrating its commitment to clean energy.

COG therefore supports the licence renewal of the MNR and believes it will contribute significantly to Ontario's sustainability and prosperity as a result of

- The support of the next generation of reactors designed under the safety-by-design premise,
- The continued production of life-saving radioisotopes,
- The hundreds of person-hours of employment and the economic benefit that creates,
- The continued opportunity for research and development and
- The career development of the next generation of nuclear workers who will design and operate the future nuclear power plants needed to combat climate change and meet Ontario's net-zero emissions by 2050.

Canada is a Tier-1 Nuclear nation and institutions such as McMaster University and its MNR support the growing demands of research, education, and expertise in the nuclear field. The MNR is a valuable and indispensable contributor to domestic and international industry and research partners, and renewing its licence will ensure the continued success of Canada as a nuclear leader.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Rachna Clavero', with a long horizontal flourish extending to the right.

Rachna Clavero
President and CEO
CANDU Owners Group Inc.