

Ontario Tech University
2000 Simcoe Street North
Oshawa, Ontario
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September 30, 2022

Mr. Andrew McAllister
Director
Nuclear Processing Facilities Division

Canadian Nuclear Safety Commission
280 Slater Street, Post Office Box 1046, Station B
Ottawa, Ontario
K1P 5S9

Subject: Letter of Intent - Confirmation of Ontario Tech University's Commitment Towards Applying to License a Subcritical Assembly.

Dear Director McAllister:

The University of Ontario Institute of Technology (Ontario Tech University) hereby confirms that it is committed to taking the necessary steps to obtain a CNSC License for a subcritical assembly.

Preamble

Ontario Tech University is located in Oshawa, Durham Region, Ontario, and home to Canada's only undergraduate Nuclear Engineering program. Ontario Tech currently holds two Canadian Nuclear Safety Commission (CNSC) licenses: A Class II Nuclear Facility License for our neutron generator and a Consolidated Nuclear Substances and Radiation Devices License for our general radiation use in research and teaching. These licenses provide critical research and learning opportunities for our faculty, students, and partners. In the Spring of 2022, Ontario Tech acquired assets from the legacy subcritical assembly at Polytechnique Montréal. These assets are in secure storage at Ontario Tech University's campus and, in its current separated state, do not constitute a subcritical assembly.

Although it is possible to utilize the assets as is, the construction of a subcritical assembly is an instrumental part of solidifying Ontario Tech University's commitment to preparing students for future careers, enabling industry driven applied research, and upskilling the workforce. Updates and additions that build upon the original subcritical assembly design will be proposed to better meet these intended purposes and further enhance the safety and protection of students and faculty using the assembly. Moreover, more frequent, and diverse use of the subcritical assembly is expected when compared to how it was previously operated at Polytechnique Montréal. The operation of a subcritical assembly will further expand our research and teaching endeavours, and our record of accomplishment on radiation safety demonstrates our ongoing commitment to the protection of our campus and the community.

Overview of The Licensing Project

Ontario Tech recognizes the regulatory requirements and expectations regarding the operation of a subcritical assembly. In summary: Ontario Tech must apply for a CNSC License and will require Commission authorization should we intend to operate the nuclear assets collectively as a subcritical assembly. We propose to operate the subcritical assembly in our secure nuclear facility complex on our North campus located at 2000 Simcoe St North, Oshawa. Minor renovations of an existing nuclear laboratory are expected to accommodate the subcritical assembly. Throughout the license application process Ontario Tech University will comply with the Nuclear Safety and Control Act and relevant nuclear facilities regulations. It is anticipated that the licensing application will be submitted to the CNSC in the 2023/2024 Fiscal Year.

It is also recognized that the Commission will consider our application at a hearing during which Indigenous groups, members of the public, and stakeholders would be able to intervene. In anticipation of an application submission, Ontario Tech University has begun project outreach by engaging internal collaborators, and on-campus groups. Plans to engage with Indigenous community representatives, external stakeholders and community members are in progress. The project was also introduced through casual conversation with passersby at the University booth at the OPG Community Open House on September 24, 2022, at which over 2,000 community members were in attendance.

Ontario Tech University Long-Term Commitment

Ontario Tech University will fully utilize the subcritical assembly to embed applied learning opportunities in academic programs in areas such as reactor physics and kinetics, and radiation protection practice. In addition, it will provide industry driven and applied research opportunities for students and faculty members. The research and service contract activities with external partners will enable us to solve real-world problems and create innovative solutions in a variety of industry sectors (e.g., nuclear, health, safety, etc.). The University is committed to the long-term use of the subcritical assembly as it will underpin our Nuclear Engineering and Health Physics Radiation Science programs.

Should you require further information please do not hesitate to contact myself or Francis Arnaldo, Ontario Tech's Biosafety and Radiation Safety Officer, at francis.arnaldo@ontariotechu.ca.

Sincerely,



Jennifer Freeman
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Ontario Tech University
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Cc: Ms. Carley Crann, Project Officer, Nuclear Processing Facilities Division, CNSC
Dr. Steven Murphy, President and Vice-Chancellor, Ontario Tech University
Dr. Les Jacobs, Vice-President Research and Innovation, Ontario Tech University
Mr. Francis Arnaldo, Biosafety and Radiation Safety Officer, Ontario Tech University