



**Written submission from
Toronto Region Board of Trade**

**Mémoire de
Toronto Region Board of Trade**

In the Matter of

À l'égard de

**Application to allow the production of
lutetium-177(Lu-177) at the Bruce Nuclear
Generating Station (NGS)**

**Demande de modification de permis visant à
permettre la production de lutécium 177 à la
centrale nucléaire de Bruce**

Public Hearing - Hearing in writing based on
written submissions

Audience Publique - Audience fondée sur des
mémoires

June 2021

Juin 2021



May 27, 2021

Tribunal Officer, Secretariat
Canadian Nuclear Safety Commission
280 Slater Street
P.O. Box 1046, Station B
Ottawa, Ontario K1P 5S9
Email: cns.interventions.ccsn@canada.ca

Re: Bruce Power Licence Amendment Application (June 25, 2021 Hearing in Writing)

Dear President and Commission Members,

I am writing to you to express the Toronto Region Board of Trade's support for Bruce Power to be granted a licence amendment to produce Lutetium-177 (Lu-177). The Board is confident that Bruce Power can effectively leverage their infrastructure to become a reliable key supplier of medical isotopes for the advancement of cancer treatments.

The Board is one of the oldest and largest chambers of commerce in North America, serving the Toronto region's business community for the past 175 years. We have a diverse membership, with more than 13,500 members from across many sectors. We have a robust policy department that provides thought leadership and advocates to all levels of government for policies that encourage growth and prosperity. Bruce Power has been a long-time member of the Board and an active contributor on our Energy Transition Policy Committee.

Bruce Power already supplies life-saving medical isotopes across the globe to keep medical equipment sterilized and assist in fighting disease. In collaboration with their trusted partners, Bruce Power is building on its collective expertise and industry knowledge to meet the global demand for isotopes that sterilize medical equipment and treat various types of cancer.

Medical isotope production represents one of the key ways in which nuclear science positively impacts Canadians, providing transformative and alternative cancer treatments while also generating sustainable economic and societal benefits. Canada's nuclear isotope program pioneered several medical applications which are used widely, and much of that work has been focused on the diagnosis and treatment of cancer. As demand for medical isotopes is expected to grow substantially in the next decade, there is a need for additional irradiation capacity.

Once operational, the Isotope Production System (IPS) will be a game changer in the global medical isotope supply chain, providing unprecedented capacity for production using the existing Bruce Power infrastructure. The IPS will have the capacity to produce a wide variety of isotopes and will open the door to large-scale research and development opportunities in Canada.



The IPS will first be used to produce Lu-177, an isotope which is currently used to treat neuroendocrine tumors, and has additional applications for prostate and breast cancer treatments. Bruce Power submitted a licence amendment application to CNSC in November 2020 to allow the production of Lu-177 and plan to begin to supply the world market with Lu-177 in 2022.

Bruce Power has fostered meaningful relationships with the Indigenous communities in their area and is committed to consulting with them on this project. The Board hosted a podium event in December 2019 focused on the importance of building strong relationships between the energy sector and Indigenous communities, where Bruce Power was able to showcase their ongoing commitment to partnership. Bruce Power has partnered with the Saugeen Ojibway Nation (SON) to explore ways of jointly marketing new isotopes in support of the global fight against cancer, while also working together to create new economic opportunities within the SON territory. The partnership will use the made-in-Ontario Isotope Production System installed into Bruce Power's nuclear reactors to produce Lu-177 and other isotopes used in the diagnosis and treatment of cancers in hospitals around the world.

The Toronto Region Board of Trade is in strong support of Bruce Power's application for a licence amendment to produce Lutetium-177. The Board trusts Bruce Power to become a reliable and key supplier of this important medical product.

Sincerely,

A handwritten signature in black ink that reads "Craig Ruttan". The signature is written in a cursive, flowing style.

Craig Ruttan
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Toronto Region Board of Trade
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