



CMD 26-H110.3

Date: 2026-06-01

**Written Submission from
Brightshores Health System**

**Mémoire de
Brightshores Health System**

In the matter of

À l'égard du

Bruce Power

Application to change the lutetium-177
production process at Bruce A and B
Nuclear Generating Stations

Bruce Power

Demande visant à modifier le processus de
production de lutécium 177 aux centrales
nucléaires de Bruce A et B

Hearing in Writing

Audience par écrit

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Brightshores
Health System

1800 8th Street East
Owen Sound, ON
N4K 6M9

(519) 376-2121
www.gbhs.on.ca

May 29, 2026

Subject: Public Submission in Support of Bruce Power's Hot Cell Application
to Advance Cancer Care

To the Members of the Canadian Nuclear Safety Commission,

I am writing to express my full support for Bruce Power's application for approval to operate a hot cell at its Central Maintenance Facility in support of medical isotope production, including lutetium-177.

Medical isotopes are essential tools in modern medicine. Cobalt-60, which has been safely produced at the Bruce Power site for decades, is used to sterilize a significant portion of the world's medical devices and, more recently, in radiation therapy for cancers such as brain and breast cancer. These contributions have had an enormous impact on patient safety and treatment outcomes globally.

The production of lutetium-177 marks an important advance in cancer care. Since 2022, Bruce Power's Isotope Production System in Unit 7 has made Canada the first country in the world to produce this isotope using a commercial nuclear power reactor. Lutetium-177 is a critical element of targeted radionuclide therapies used in precision medicine, particularly in the treatment of prostate cancer. For patients and families facing a cancer diagnosis, timely access to these therapies can be life-changing.

The proposed hot cell would play a vital role in ensuring that lutetium-177 can be delivered safely, efficiently, and reliably. Operating a hot cell at Bruce Power would allow target-carrier removal to be completed onsite in a shielded, purpose-built environment using remote manipulators and lead-glass viewing systems designed to protect workers and the public.

From a health-care perspective, bringing this capability onsite matters. It streamlines the isotope supply chain, reduces delays, enhances safety, and supports consistent delivery of critical materials used in cancer treatment. These improvements ultimately benefit patients by helping ensure stable access to therapies that depend on highly time-sensitive isotopes.

Looking ahead, Bruce Power has the capacity to scale isotope production further, with plans underway to expand the Isotope Production System to Unit 6 in 2027. Approving the hot cell is an important step in supporting that growth and ensuring Canada remains a reliable supplier of medical isotopes as demand for precision medicine continues to increase worldwide.

I am also encouraged by the broader societal benefits associated with Bruce Power's isotope program, including meaningful partnerships with Indigenous communities through Gamzook'aamin aakoziwin. Stable revenues from isotope production have supported community initiatives such as recreation facilities and food banks, demonstrating that advances in health care can go hand-in-hand with positive community outcomes.

Bruce Power has demonstrated a strong commitment to safety, regulatory compliance, and public responsibility. As a health-care professional and leader in research and innovation, I believe the proposed hot cell represents a prudent, well-designed investment in infrastructure that will directly contribute to better cancer care and improved patient outcomes.

Thank you for the opportunity to participate in the Commission process. I respectfully urge the Canadian Nuclear Safety Commission to approve Bruce Power's application to operate a hot cell at its Central Maintenance Facility in support of medical isotope production and patient care.

Sincerely,



Rebecca Brookham, PhD, RKin, CIC
Director | Office of Research & Innovation
Brightshores Health System
T 519.376.2121 x2051
brightshores.ca

