Canadian Nuclear Safety Commission | Commission canadienne de sûreté nucléaire

CMD 26-H110.4

Date: 2026-06-11

Written Submission from Rebecca Wong (University Health Network)

Mémoire de Rebecca Wong (Réseau Universitaire de la Santé)

In the matter of

À l'égard du

Bruce Power

Bruce Power

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

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

Hearing in Writing

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Subject: Public Submission in Support of Bruce Power's Hot Cell Application at the Central Maintenance Facility

To the Canadian Nuclear Safety Commission,

I am writing to express my strong support for Bruce Power's application to operate a hot cell at its site to further enhance Canada's medical isotope supply chain, particularly the production of lutetium-177 used in cancer-fighting therapies.

Bruce Power has a long and proven history of safely producing medical isotopes that benefit patients around the world. Since 1986, cobalt-60 produced at the Bruce Power site has been used to sterilize approximately 30 per cent of the world's single-use medical devices, implants, and medical equipment. Since 2021, Bruce Power has also produced medical-grade cobalt-60 for radiation therapy treatments for diseases including brain and breast cancer. These achievements demonstrate both technical expertise and a strong commitment to public health.

In 2022, Bruce Power's Isotope Production System (IPS) in Unit 7 achieved a global first when it became the first commercial nuclear reactor in the world to produce lutetium-177. This isotope is a key component of theranostic treatments used in precision medicine, particularly for prostate cancer, and demand for it continues to grow rapidly worldwide. Planning is already underway to expand this capability by scaling the IPS to Unit 6 in 2027, underscoring the importance of building the necessary supporting infrastructure today.

Bringing hot cell operations onto the Bruce Power site will streamline logistics, reduce unnecessary transportation of radioactive materials, and lower emissions associated with off-site processing. Importantly, it will also improve operator safety by conducting this work in a purpose-built, controlled environment that aligns with Canada's rigorous nuclear safety standards. Establishing this capability in Ontario further strengthens the domestic medical isotope supply chain and enhances Canada's leadership in nuclear medicine.

Through the Gamzook'aamin aakoziwin partnership, Saugeen Ojibway Nation has invested in Bruce Power's isotope business. Since 2022, this partnership has generated stable revenues for both Chippewas of Saugeen First Nation and Chippewas of Nawash Unceded First Nation, supporting important local initiatives such as the Saugeen Amphitheatre restoration, the Nawash Arena, and community food banks. The continued growth of isotope production—including through infrastructure such as the proposed hot cell—helps sustain these shared benefits.

Bruce Power's safety record, operating experience, and history of regulatory compliance provide confidence that the proposed hot cell will be operated safely, securely, and in full accordance with CNSC requirements. Approving this application would support innovation in health care, improve access to life-saving cancer therapies, reduce environmental impacts through more efficient logistics, and reinforce Canada's role as a global leader in the peaceful use of nuclear technology.

Thank you for the opportunity to provide a written submission as part of the Commission process. I respectfully encourage the Canadian Nuclear Safety Commission to approve Bruce Power's request to operate a hot cell at its Central Maintenance Facility.

Sincerely,

Rebecca KS Wong

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