CMD 21-H100.18

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Written submission from Cameco Corporation

Mémoire de Cameco Corporation

À l'égard de

In the Matter of

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

Canadian Nuclear Safety Commission 280 Slater Street, P.O. Box 1046, Station B Ottawa, ON K1P 5S9 **CAMECO CORPORATION**

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

Dear President and Commission Members,

I write to you today in full support of Bruce Power's licence amendment to produce Lutetium-177.

Cameco is one of the largest global providers of the fuel needed to energize a clean-air world. Utilities in Canada and around the world rely on our nuclear fuel products to generate electricity in safe, reliable, carbon emission free nuclear reactors.

Bruce Power operates a world-class nuclear site on the shore of Lake Huron which safely generates more than 30 per cent of Ontario's clean-air electricity using natural uranium fuel from Cameco. Bruce Power also supplies life-saving medical isotopes that keep medical equipment sterilized and assist in fighting disease around the world.

Medical isotopes are a pillar of nuclear medicine – the benefits of which are felt by millions of Canadians and people across the world each year. Bruce Power, together with its trusted partners, brings extensive knowledge, expertise, capability, and innovation in medical isotope production that helps to fortify Canada's global leadership position in isotope production.

Cameco has extensive experience and expertise in the development and manufacture of in-core reactor components, and we are proud to be part of the development of the Isotope Production System (IPS) technology that will continue to expand the benefits of power reactors from clean electricity to life saving medical isotopes such as Lutetium-177.

The IPS technology will first be used in the production of Lutetium-177, which is currently used to treat neuroendocrine tumors and has additional applications for prostate and breast cancer treatments. One of the advantages of the IPS technology is its ability to produce a range of important isotopes and this will open the door to future research and development opportunities that will benefit society.

Bruce Power is an active community partner and an industry leader in community engagement and development which is evident by its extensive community outreach and investment programs. Bruce Power has also partnered with the Saugeen Ojibway Nation (SON) to explore how they can jointly market new isotopes in support of the global fight against cancer, while also working together to create new economic opportunities within the SON territory.

In summary, I have the utmost confidence that Bruce Power has the expertise, experience and knowledge needed to safely produce Lutetium-177 and am pleased to support Bruce Power's request to amend its licence to allow this production to occur. Making this amendment will play an important role in saving lives, support future life-saving innovations, and stimulate economic activity by supporting an increasingly sophisticated and robust isotope ecosystem.

Sincerely,

Dale Clark Vice-President

Cameco Fuel Services Division

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