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Written	submis	sion from
Saugeen	Ojibwa	ay Nation

Mémoire de la Nation Ojibway de Saugeen

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





Written Submission of the Saugeen Ojibway Nation -

Application from Bruce Power to Amend the existing Power Reactor Operating Licence (PROL 18.02/2028) for the Bruce Nuclear Generating Station for the production of Lutetium-177.

Hearing in Writing: June 25, 2021

#### Introduction

The purpose of this document is to provide a written submission on behalf of the Saugeen Ojibway Nation (SON) to the Canadian Nuclear Safety Commission (the Commission) as part of the Commission hearing for Bruce Power's (BP) application to amend the current Power Reactor Operating Licence (PROL 18.02/2028) for the Bruce Nuclear Generating Station (BNGS) to include and permit the production of Lutetium-177 (Lu-177).

The Saugeen Ojibway Nation (SON) is comprised of the Anishinaabe People of the Chippewas of Nawash Unceded First Nation and Chippewas of Saugeen First Nation. SON's Territory (or Anishinaabekiing) encompasses much of the Saugeen (Bruce) Peninsula, extending down south of Goderich and east of Collingwood. The waters that comprise the Territory are the waters surrounding these lands and include the lakebed of Lake Huron from the shore to the international boundary with the United States and the lakebed of Georgian Bay to halfway across the Bay. The SON Communities occupy large, unceded communal lands (reserves) bordering Lake Huron and Georgian Bay (Territory Map: Attachment 1). SON also has an exclusive hunting reserve in the northern part of the Saugeen Peninsula. In SON's Territory, SON members have proven and asserted Aboriginal and treaty rights, including a court-proven commercial fishing rights (*R v Jones Nadjiwon 1993*) and active commercial fishery, and an active land and lakebed title claim. Saugeen Ojibway Nation asserts its rights, jurisdiction, and governance across the Territory.

SON's ancestors have used and occupied the Anishinaabekiing since time immemorial and its People continue to do so today. SON's Territory consists of everything integral to life—the lands, rivers, lake, winds, grass, people, animals, and fish. The Anishinaabekiing has sustained the SON people physically and spiritually for countless generations and must continue to do so far into the future.

BNGS is located in the SON Territory, within Treaty 45 ½, on the shore of Lake Huron within both historical and contemporary areas of significance for the SON People, including areas of historical settlements, ceremonial and burial or sacred sites, areas of historical and contemporary commercial and subsistence fishing, and areas of historical and contemporary harvesting. The lands and waters that BNGS is now part of, are areas of importance and meaning for SON. These are the lands and waters where our Ancestors lived and non-human relatives lived since time immemorial, and where our People continue to uphold their sacred responsibilities, relationships and connections to who we are as Anishinaabe.

## Background

In 2011, SON and BP entered into a Protocol Agreement that provided the framework to ensure that SON and BP could meaningfully engage in consultation regarding the on-going operations of BNGS. In 2018, we developed a formal structure to ensure that we had a productive format where SON and BP could engage on topics of interest, issues related to BP's on-going operations, environmental and regulatory matters, training, employment, contracting / business opportunities, and wealth creation. Our progress on these initiatives gave us the confidence in our ability to work together and we are committed to continuing to build a strong and positive relationship. The foundation of this progress is recognition of the importance of meaningful and reciprocal dialogue towards creating opportunities to work together. One of the opportunities that emerged from our discussions regarding wealth creation was the opportunity to partner with BP in the production of radioisotopes for medical and research purposes (or medical isotopes). These discussions evolved as part of efforts to ensure that BNGS is operated in a manner that recognizes and respects SON rights, interests, Territorial jurisdiction and includes SON meaningfully in the on-going operations of its facility - particularly as BP now looks to extending its operations in SON Territory to 2064. SON has long sought to be part of the wealth generated across our Territorial lands and waters, in ways consistent with our interests and aspirations. We believe this partnership project holds great promise as one element of a new relationship that creates mutually shared benefits.

## **SON-BP Partnership**

In 2019, we began actively working together to determine how a partnership to produce medical isotopes would be structured, how SON would benefit from the partnership, and how best to inform the SON Communities and seek their approval.

The partnership is developing a novel delivery and retrieval system to produce an important radioisotope known as Lutetium-177 (Lu-177). Lu-177 is used in targeted radionuclide therapy to treat cancers, such as neuroendocrine tumors and prostate cancer. Medical-grade Lutetium, which is produced in nuclear reactors, is used to destroy cancer cells while leaving healthy cells unaffected. Once operational, this proposed delivery system will have the capacity to produce a wide variety of isotopes and will open the door to large-scale research and development opportunities. Bruce Power will be responsible for the operation and production of isotopes and manage this through a partnership with Kinectrics and Framatome, which will have a service agreement for key developmental risk, implementation, and commercial elements. They will take the Lu-177 from Bruce Power, process it in a new facility based in Ontario, and export this around the world.

SON's component of the partnership is focused on joint collaboration and marketing of isotopes with BP, and SON's financial investment into the medical isotope infrastructure. SON will earn an annual return, based on their investment once Lu-177 is in production. The project revenue sharing stream will enable SON to take a self-directed approach to managing social and economic conditions within the Communities. The SON- BP partnership is structured to continue to the end of life of the site and is adaptable to new isotope production should market dynamics support the production of additional medical isotopes in the future, creating additional opportunities for SON to derive economic benefit.

One of the most important elements of this partnership between SON and BP is Community support. We have had several successful Community Information Sessions regarding the partnership at various stages of its development. Nuclear issues can be a divisive topic among SON Community Members with a legacy of impacts and exclusion from decision making and wealth generation beginning in the 1960's and it was essential to the success of this partnership to gain Community support. Through our collaborative work and engagement with Community, we have created a name in the Anishinaabe language "Gamzook'aamin aakoziwin" (meaning "We are teaming up to fight the sickness") and worked with a Community artist to create a logo for the partnership that represents our vision for this partnership, and our collective goal of fighting cancer. We have a website dedicated to the partnership (<a href="www.fightingcancertogether.ca">www.fightingcancertogether.ca</a>) and continue to share information, videos, and other communications with the SON Communities throughout the development of the partnership. We know that this is a project and a partnership that the SON Communities support.



Gamzook'aamin aakoziwin FIGHTING CANCER TOGETHER

Another positive aspect of the production of Lu-177 is that it will not require any changes to the footprint or to major infrastructure at BNGS, and will not create any new environmental or human health impacts, nor add to current impacts and interactions between BNGS and the environment. Of great importance for the SON Community is that the production of Lu-177 (and other medical isotopes) will not lead to the creation of any new types or additional volumes of nuclear waste in our Territory.

## **Conclusion**

In May 2021, SON and BP signed our collaboration and marketing partnership agreement on the production of Lutetium-177, confirming our mutual commitment to this partnership. We support CNSC's issuance of the amendment to BP's PROL to ensure that the production of Lu-177 can proceed as planned, and we can begin to be a meaningful part of not only the wealth generated in our Territory, but part of the production of a product that has the potential to change peoples' lives across the county.

# **Attachment 1**

