Frequently Asked Questions

SAUGEEN OJIBWAY NATION – BRUCE POWER PARTNERSHIP

Saugeen Ojibway Nation and Bruce Power have entered into the New Isotope Collaboration and Marketing Agreement to jointly market the medical isotope Lutetium-177 being produced at the Bruce Power site.

Questions *and* Answers

Q. How did SON and Bruce Power develop this Partnership?

In 2018, SON and Bruce Power began substantive discussions on a new path forward, including ways for SON to participate in and benefit from the wealth generated in SON Territory related to Bruce Power's operations.

One of the options that Bruce Power brought to the table was to partner on their new project to produce the medical isotope Lutetium-177 at the Bruce Power site. While there were other options for the SON Joint Council to consider, medical isotopes was the best fit.

In early 2019, SON and BP signed a Terms of Reference to begin more in-depth work towards a potential SON – BP medical isotopes partnership, including partnership development dialogue, lobbying the federal government to enhance SON's investment and return potential, and consulting the SON Communities to inform and assess support for the partnership.

In May 2021, SON and BP finalized the New Isotope Collaboration and Marketing Agreement.

Q. Does Bruce Power have other partners in the medical isotopes project?

Yes. Bruce Power has partnered with Isogen (Kinectrics and Framatome joint venture) and ITM to produce and distribute new isotopes at Bruce Power. Isogen has developed the Isotope Production System or IPS that will be used to create medical isotopes at Bruce Power. ITM is a medical company focusing on cancer treatment and will provide the source material for isotope creation and be responsible for distributing the final product to its clients in the health care and cancer treatment sectors.

Q. How were the SON Communities consulted about the Partnership?

In 2019, we held well-attended Community Information Sessions in Saugeen and Neyaashiinigmiing and distributed information online and by mail to Community members about the potential partnership, and asked Community members for their thoughts and feedback. We also created a stand-alone webpage with up to date information about the Partnership. We held additional (virtual) Community Information Sessions in 2020 and 2021. We received 80 responses from Community members regarding where they felt each Community's annual revenue should be directed.

SON Joint Council felt that this Partnership was something that Community members were supportive of, something SON members would be proud to be part of and something that would provide a financial benefit for the Communities. But more than that, the Partnership will have positive impacts on those fighting cancer locally, and globally.

Q. How will Saugeen Ojibway Nation (SON) and the SON Communities benefit from this Partnership?

Once Lu-177 is in full production, SON will earn an annual return on investment, to be shared equally between the two Communities. Bruce Power and SON undertook significant government lobbying beginning in Q1 2019 to promote the Partnership with the goal of securing $20 million dollars to represent SON's investment into Lu-177 infrastructure to ensure maximized returns (up to $2 million annually). Several factors impacted the Partnership's ability to secure government funds (including the onset of the COVID-19 pandemic and reallocation of government funding in Q1 2020), and we have yet to secure the government investment though government outreach and lobbying is ongoing.

Notwithstanding government contributions, Bruce Power and SON have worked together to secure SON's position in the Partnership. The interim arrangement reduces SON's originally anticipated annual return until government or other funds can be applied to this investment to enhance SON's annual earnings to match our original goal.

This goal remains viable as we continue to explore and participate in Government Funding opportunities and promote the importance of supporting First Nation's economic development and wealth creation strategies while at the same time supporting the development of a secure, redundant, domestically produced source of medical isotopes for Canada.

Q. How does Bruce Power benefit from this Partnership?

Bruce Power believes this is a transformational project at a global scale. The Partnership with SON can build something unique that will meet our shared goals of advancing human health, while also recognizing the importance creating new economic opportunities with SON in SON Territory.

Q. Will SON be involved as Partners if Bruce Power decides to produce more types of medical isotopes?

Yes. There is a clause in the current agreement which enables SON future opportunities to partner when new/different isotopes are produced using the IPS.

Q. Is there an oversight body for the Partnership?

Yes. We have established the Gamzook'aamin aakoziwin Oversight Committee. This Committee includes representatives from Bruce Power, SON Joint Council, SON Environment Office, and the Committee will be looking for SON Community members to join in 2022. The mandate of the Committees is to review and provide input on annual work plans, progress and financial reports, and to evaluate new opportunities to enhance the impact of the Partnership. The Committee takes information regarding the progress and advancement of the Partnership and makes recommendations for decision making to their respective organizations.

Q. What is the production cycle for Lutetium-177? How will Bruce Power produce Lutetium-177?

Bruce Power worked with Isogen to develop a made-in-Ontario Isotope Production System or IPS. The IPS will be installed in Bruce Power's reactors though the course of the Life Extension Program or Major Component Replacement project currently underway. BP will first use the IPS to produce a medical isotope called Lutetium-177 (Lu-177), a medical isotope which is currently used to treat neuroendocrine tumors and has applications for prostate and breast cancer treatments.

The IPS is used to turn targets into medical isotopes through a process referred to as irradiation. This is a similar process used by Bruce Power in the production of Cobalt-60. Lu-177 is made in the IPS by irradiating a stable isotope called Ytterbium-176. The Yt-176 is sealed in special containers and placed in the reactors for about two weeks and then sent for processing and distribution to health care facilities. Each container may contain enough Lu-177 for about 200 patient treatments.

ITM is the partner responsible for supplying the Yt-176 to Isogen for irradiation in the IPS at Bruce Power and for processing and distributing the final product. Once irradiated to Lu-177, ITM receives and processes the Lu-177 into the final medical grade product and distributes to health care clients globally.

The Partnership expects Lu-177 production and availability to the world market in 2022.

Q. Does the production of Lutetium-177 add to the nuclear waste issue?

No. The production of Lu-177 does not create a new source nuclear waste. All materials are either used for treatment of patients or are recycled and used to produce more Lu-177.

Still Have Questions?

Additional Resources

www.fightingcancertogether.ca

Contact

Kathleen Ryan
kathleen.ryan@brucepower.com
or
Michael Chegahno
michael.chegahno@saugeenojibwaynation.ca

Bruce Power
Innovation at work

CS210406B R000 OCT2021