Saugeen Ojibway Nation, Bruce Power, Isogen and ITM advance initiative to double capacity of IPS to produce cancer-fighting medical isotopes

May 28, 2024 – An international collaboration between Bruce Power, Saugeen Ojibway Nation (SON), Isogen (a Kinectrics and Framatome company) and ITM Isotope Technologies Munich SE (ITM), came together to celebrate the installation of a second production line that will double the production capacity of the Isotope Production System (IPS) on Bruce Power's Unit 7.

The ambitious program timeline is on pace to deliver commissioning of the IPS upgrades later this year to meet forecast demand increases for cancer-fighting isotopes.
Premier Doug Ford was on hand May 27 for the expansion announcement at the University Health Network's Princess Margaret Cancer Centre.

"This announcement is an exciting development that highlights the many benefits of nuclear power, including the expanded production of life-saving medical isotopes," **said Premier Ford**. *"Our government is proud to support the expansion of nuclear power as part of our plan to bring safe, reliable and affordable energy, along with cutting-edge cancer treatments, to families across Ontario. I would like to congratulate Bruce Power, Isogen, Saugeen Ojibway Nation and ITM for delivering this incredible expansion, cementing Ontario's place as a global leader in the production of cancer-fighting medical isotopes."*

"Bruce Power is proud of our long legacy as a key producer of medical isotopes, which are used globally in the fight against cancer," **said Mike Rencheck, Bruce Power President and CEO**. *"Together with our partners, we are continuing to expand our capabilities to supply the isotopes needed to meet demand and advance research in cancer treatments and procedures to help save lives."*

The upgrades to the IPS will add a second production line to the existing system in Unit 7, which became the first commercial power reactor in the world to produce lutetium-177 in October of 2022. This second production line, designed and installed by Isogen, will enable Unit 7 to increase production of lutetium-177 to meet increasing demand for the medical isotope, which is used in precision oncology for targeted therapy of a growing number of cancers including neuroendocrine tumours and prostate cancer.

"We are proud to deliver this second line, doubling the industry-leading capacity for Lutetium-177 production at Bruce Power," **said John D'Angelo, CEO of Isogen**. *"The unprecedented IPS capacity and the system's proven reliability, provides assurance that the supply of isotopes needed for life-saving radiotherapeutics is made available to treat cancer patients across the world."*

The made-in-Ontario IPS, designed and installed at Bruce Power by Isogen, enables large-scale reliable production of lutetium-177, which is transported to ITM in Germany for further processing and global distribution. Expansion of the IPS will provide ITM increased access to this critical isotope, which has been successfully used in various clinical and commercial radiopharmaceutical cancer treatments globally.

"Our strong continued partnership with Bruce Power and Isogen allows us to further enhance and accelerate our global production capacity for lutetium-177, a medical isotope with proven abilities to deliver therapeutic value and improved outcomes for cancer patients," **said Steffen Schuster, CEO of ITM**. *"As a leading radiopharmaceutical developer and innovator, it is our mission to help patients living with hard-to-treat cancers. This initiative supports that by increasing our ability to meet the growing demand."*

Ontario's Energy Minister Todd Smith lauded the announcement as Ontario continues to enhance its position as a world leader in isotope production.

"Not only are Ontario's nuclear reactors providing more than 50 per cent of the province's electricity, they are also producing life-saving medical isotopes that are helping to diagnose and treat prostate cancer, neuroendocrine tumors and other diseases," **said Minister Smith.** *"Our government is proud to invest in nuclear energy as partnerships, like this one at Bruce Power, are playing an important role in the incredible transformation of health care."*

Pam Damoff, Parliamentary Secretary to the Minister of Foreign Affairs and the Member of Parliament for Oakville North-Burlington, has been a strong advocate for Canada's medical isotope sector and was on hand to represent the Federal Government at the event.

"The federal government recognizes the importance of the medical isotope sector in supporting cancer fighting treatments at home and around the world," **said Damoff**. *"It is initiatives and innovations like the Isotope Production System which will continue to leverage Canada's existing nuclear capacity to drive us forward as an international leader in the medical isotope supply chain."*

Leaders from Saugeen Ojibway Nation, which jointly markets isotopes produced through the IPS installed at Bruce Power, were also on hand. The Gamzook'aamin aakoziwin partnership supports the global fight against cancer while creating new, meaningful economic opportunities within SON territory.

"As Ogimaa of the Neyaashiinigmiing Community, I would like to share our enthusiasm for the expansion and growth of the medical isotope initiative. We are proud of our inclusion in the growth of the field of nuclear medicine and the benefits it will deliver to so many people," **said Chief Greg Nadjiwon, Chippewas of Nawash Unceded First Nation.**

"We are proud to be a part of the global fight against cancer through this innovative project as demand for innovative treatments for cancer is increasing on a daily basis," **said Chief Conrad Ritchie, Chippewas of Saugeen First Nation**. *"The Gamzook'aamin aakoziwin partnership will continue to provide a reliable source of these isotopes for patients close to home, in our communities, and around the world."*

Dr. Kevin Smith, President and CEO of UHN, attended the announcement, as well as Dr. Keith Stewart, Vice-President Cancer and Director of the Princess Margaret Cancer Centre and Dr. David Kirsch, Head of Radiation Medicine Program at Princess Margaret Cancer Centre.

"Radiotheranostics is a top priority for us at Princess Margaret. It is great news that we are producing lutetium-177 here at home," **said Dr. Kirsch**. *"In the long run, this will result in Radiotheranostics treatment being more accessible for patients."*

With installation of the production line complete, commissioning activities will begin prior to the new production line entering commercial service, projected for later this year.

About Bruce Power

Bruce Power is an electricity company based in Bruce County, Saugeen Ojibway Nation Territory, Ontario. We are powered by our people. Our 4,200 employees are the foundation of our accomplishments and are proud of the role they play in safely delivering clean, reliable nuclear power to families and businesses across the province and cancer-fighting medical isotopes around the world. Bruce Power has worked hard to build strong roots in Ontario and is committed to protecting the environment and supporting the communities in which we live. Formed in 2001, Bruce Power is a Canadian-owned partnership of TC Energy, OMERS, the Power Workers' Union and The Society of United Professionals. Learn more at www.brucepower.com and follow us on Facebook, Twitter, LinkedIn, Instagram, TikTok and YouTube.

About Isogen

Isogen is a joint venture between Framatome and Kinectrics, whose mission is to enable the use of CANDU reactors to produce the medical isotopes needed to treat and diagnose patients with serious diseases world-wide. Isogen's enabling partnerships with Bruce Power and ITM allows us to produce the world's largest and most reliable supply of life-saving, short-lived, therapeutic medical isotopes. Learn more at www.isogen.ca and follow us on LinkedIn.

About ITM Isotope Technologies Munich SE

ITM, a leading radiopharmaceutical biotech company, is dedicated to providing a new generation of radiomolecular precision therapeutics and diagnostics for hard-to-treat tumors. We aim to meet the needs of cancer patients, clinicians and our partners through excellence in development, production and global supply. With improved patient benefit as the driving principle for all we do, ITM advances a broad precision oncology pipeline, including two phase III studies, combining the company's high-quality radioisotopes with a range of targeting

molecules. By leveraging our nearly two decades of pioneering radiopharma expertise, central industry position and established global network, ITM strives to provide patients with more effective targeted treatment to improve clinical outcome and quality of life. www.itm-radiopharma.com

About the Saugeen Ojibway Nation (SON)

Saugeen Ojibway Nation describes the Territory and the Anishnaabek People of the Chippewas of Nawash Unceded First Nation and Chippewas of Saugeen First Nation. The Saugeen Anishnaabek have inhabited the Saugeen (Bruce) Peninsula for as long as history remembers.

As Anishnaabek, SON People are subject to Anishnaabe law and are ever mindful of our duty to be stewards of our land. SON Territory includes over 2 million acres of southwestern Ontario and it includes the lake bed of Lake Huron surrounding the Territory. SON has treaties with the Crown, sharing part of our land with people from around the world.