



Framatome and KHNP to assess feasibility of medical isotope production at South Korean nuclear power plant

April 17, 2024 - Framatome and Korea Hydro & Nuclear Power (KHNP) have signed a Memorandum of Understanding (MoU) to demonstrate the feasibility of producing non-carrier added Lutetium-177 - a medical isotope used for a variety of lifesaving cancer treatments - at the Wolsong nuclear power plant in South Korea.

Under this MoU, Framatome and KHNP will jointly perform this technical assessment at the plant using Framatome's isotope production technology. This technology has been successfully implemented on a commercial production level at the Bruce Power nuclear power plant in Canada.

"We anticipate that commercial nuclear reactors will have an increasing role to play to backup and complement research reactors in the production of cancer-fighting radioisotopes," said François Gauché, Head of Framatome Healthcare. "This cooperation will support the future supply chain readiness to make Lutetium-177 treatments massively accessible across the world."

Through this agreement - similar to the one recently announced by [Framatome and Nuclearelectrica in Romania](#) - the two companies will look at the feasibility of using the CANDU reactor at Wolsong to support Korean production of lifesaving radioisotopes in the future.

"With this initiative, KHNP stays consistent with its social responsibility commitment, by supporting the development of modern nuclear medicine treatments in South Korea while continuing its contribution to stable energy supply and carbon neutrality," said Chang Hee-Seung, Executive Vice-President, Quality and Technology Division at KHNP.

"Framatome has been working with KHNP for decades to support the safe, reliable and sustainable operation of its nuclear fleet. We are actively engaged in supporting the long-term operation of the Hanul 1 & 2 plants for which Framatome is the Original Equipment Manufacturer," declared Catherine Cornand, Senior Executive Vice President of the Installed Base business unit at Framatome. "I am very happy to extend our cooperation through this new initiative at the Wolsong nuclear plant."

Lutetium-177 is a beta-emitting radioisotope used in targeted radionuclide therapy for the treatment of prostate cancer and in multiple promising radiopharmaceutical developments for other cancer indications. The isotope destroys cancer cells while leaving healthy cells unaffected. Framatome's proprietary isotope production technology enabled the [first large-scale commercial production of Lutetium-177 in a power reactor](#) in October 2022.

Framatome Healthcare is committed to developing products and services for the healthcare industry. Its team supports the value chain for the radioisotopes used in radiopharmaceuticals for diagnostic imaging and therapeutic purposes, supplies special alloys for the development of surgical implants and prostheses and provides advanced solutions for complex sterilization facilities essential for the use of medical materials. Framatome Healthcare's experts advance the fight against cancer and develop and support medical applications of nuclear technology.



Catherine Cornand (Framatome) and Chang Hee-Seung (KHNP) with Framatome and KHNP employees following the signing of the MoU

About Framatome

Framatome is an international leader in nuclear energy recognized for its innovative, digital and value added solutions for the global nuclear fleet. With worldwide expertise and a proven track record for reliability and performance, the company designs, services and installs components, fuel, and instrumentation and control systems for nuclear power plants. Its more than 18,000 employees work every day to help Framatome's customers supply ever cleaner, safer and more economical low-carbon energy.

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