



Current Report according to the provisions of ASF Regulation no. 5/2018 on issuers of financial instruments and market operations

Report date: 15.10.2024

Name of the issuing entity: NUCLEARELECTRICA S.A. National Company

Registered office: 48 Iancu de Hunedoara Av., District 1, Bucharest

Telephone/Fax Number: 021.203.82.00 / 021.316.94.00

Sole Registration Code with the Trade Register Office: 10874881

Registration number in the Trade Register: J40/7403/1998

Subscribed and paid-up share capital: RON 3,016,438,940

Regulated market on which the issued securities are traded: Bucharest Stock Exchange

**To: Bucharest Stock Exchange
Financial Supervision Authority**

Important event to report: Nuclearelectrica and Framatome take the next step in producing cancer-fighting Lutetium-177 in Romania

SN Nuclearelectrica SA (BVB:SNN) and Framatome have announced the successful outcome of the feasibility study which assessed the possibility of producing medical isotope Lutetium-177 (Lu-177) at the Cernavoda nuclear power plant in Romania. Lutetium-177 is used for a variety of lifesaving cancer treatments.

The two companies have now launched the implementation of the project, covering detailed engineering, procurement, installation and the commissioning of the irradiation system at Unit 2 of the Cernavoda nuclear power plant. The launch of a full-scale commercial irradiation service for medical isotopes is targeted for 2028.

“Nuclearelectrica is committed to advancing not only energy production but also public health. The production of Lutetium-177 marks a significant milestone for Romania and the global nuclear industry. Our role in supporting cutting-edge oncological treatments through nuclear medicine solidifies the role of nuclear energy in enhancing human well-being,” said Cosmin Ghita, CEO of Nuclearelectrica. *“This project highlights the multifaceted contributions that nuclear power can make—clean energy generation and life-saving medical isotopes.”*

The feasibility study was initiated in November 2023, based on Framatome’s isotope production technology. It assessed whether the infrastructure at Cernavoda could be used to convert targets into medical isotopes in addition to the current generation of reliable, low-

Societatea Nationala NUCLEARELECTRICA S.A.

Iancu de Hunedoara Boulevard 48, Bucharest 011745, Romania; Tel +4021 203 82 00, Fax +4021 316 94 00;

Trade Registry number: J40/7403/1998, Sole registration code: 10874881,

Paid and subscribed capital: 3.016.438.940 lei.

office@nuclearelectrica.ro, www.nuclearelectrica.ro

carbon electricity. The study demonstrated that by adapting Framatome’s technology to Unit 2 Cernavoda nuclear power plant, the reactor would be able to irradiate Ytterbium-176 at the market technical standard required to produce Lutetium-based radiopharmaceuticals.

“We are proud to have reached this milestone with Nuclearelectrica and to take this important project on to the next phase. Bringing additional capacities from nuclear power reactors helps build a large scale, reliable and diversified supply of critical radioisotopes to fight cancer “, said François Gauché, VP Framatome Healthcare. “The demand for massively accessible cutting-edge cancer treatments globally is growing rapidly. The nuclear industry stands ready to play its part in strengthening the supply chain for lifesaving radioisotopes in Europe and across the world.”

This project also aims at securing an appropriate supply of Lu-177 to meet Romania’s domestic needs for radiopharmaceutical production and supply. Lu-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 Lu-177 in a power reactor in June 2022.

About Nuclearelectrica

The National Company “Nuclearelectrica” SA is the national Romanian company which produces electricity, heat and nuclear fuel operating under the authority of the Romanian Ministry of Energy, with the Romanian state holding 82.49% of shares and other shareholders holding 17.50%, after the listing of the company at the stock exchange in 2013.

The NPP (CNE) Cernavoda branch operates two CANDU nuclear units, which are two of the most high-performance units among the more than 400 nuclear plants in the world, a nuclear fuel factory and is in the process of carrying out an integrated fuel cycle through the procurement of a uranium concentrate processing line, in order to support the long-term investment projects of the company.

Nuclearelectrica has a major role at the national level, contributing by more than 18% of the nuclear energy in the total energy production and by 33% in the total CO2-free energy production in Romania.

Nuclearelectrica has 28 years of operating experience. Through its 3 strategic investment projects, (Cernavoda NPP Unit 1 Refurbishment, Cernavoda NPP Units 3 & 4 Development and SMR Deployment), the company is looking to provide clean energy, support Romania’s energy stability and decarbonation targets, support the Paris Agreement and, based on its ESG strategy, to also support human health impact initiatives.

www.nuclearelectrica.ro

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.

Visit us at : www.framatome.com and follow us on [X](#) and [LinkedIn](#).

Framatome is owned by the EDF Group (80.5%) and Mitsubishi Heavy Industries (MHI – 19.5%).

About Framatome Healthcare

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.

Cosmin Ghita**Chief Executive Officer**