

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

Report date: 28.09.2023

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

Significant event to report: S.N. Nuclearelectricia S.A and Laurentis Energy Partners spearhead international collaboration to advance the production of medical isotopes in Romania

Romania's nuclear energy utility, S.N. Nuclearelectricia S.A (SNN) will collaborate with Laurentis Energy Partners (LEP), a subsidiary of Ontario Power Generation (OPG), on the production of life-saving medical isotopes at the Cernavoda Nuclear Power Plant (NPP) and explore the possibility of heavy water production in Romania.

The MoU was signed in the context of the Romanian- Canadian more than 55 years partnership and follows Canada's Natural Resources and Energy Minister Jonathan Wilkinson announcement of \$3 billion in export financing for Romania's Cernavoda Nuclear Generating Station to support clean energy security.

The agreement was formalized today, with OPG's President and CEO, Ken Hartwick, SNN's CEO, Cosmin Ghita, signing a Memorandum of Understanding in the presence of Romania's Minister of Energy, Sebastian Burduja. The signing took in the context of Nuclear Energy Agency's conference in Paris, focused on the "Roadmap to New Nuclear" which hosts over 21 international ministers and hundreds of industry professionals.

The MOU enables SNN and LEP to work together on opportunities in a number of areas, including the isotope production at SNN's Canada Deuterium Uranium (CANDU) reactor units.

"SNN is proud to partner Laurentis, a world leader in nuclear isotopes, and thus directly contribute to the healthcare industry by expanding our project portfolio through isotopes production. The nuclear industry is currently essential to generating clean energy and producing medical isotopes given the recent evolutions of the medical isotope market, and we are looking forward to this partnership with Laurentis as a way to advance much needed global solutions.

The Romanian civil nuclear program can be a benchmark for the global nuclear energy industry and a significant step towards a clean, sustainable and healthier energy future. This example of leadership and progress in Romania is a national effort and is possible thanks to the partnership and support of the Romanian State at the highest level and I especially thank the Presidency of Romania, the Prime Minister of Romania - Mr. Marcel Ciolacu, President of the Senate - Mr. Nicolae Ciucă, Interim President of the Chamber of Deputies - Mr. Alfred Simonis, Minister of Energy - Mr. Sebastian Burduja, Chairman of the Committee for Environment and Ecological Balance of the Chamber of Deputies - Mr Virgil Popescu, former Minister of Energy, and all parliamentary parties that support and have supported the development of the Romanian nuclear program." -Cosmin Ghita, Chief Executive Officer, Nuclearelectrica

"Laurentis is committed to leveraging our proven refurbishment and isotope production expertise to advance healthcare solutions and expand market opportunities in Romania," said Jason Van Wart, President and CEO of Laurentis Energy Partners. "We are proud of our partnership with SNN and look forward to our cooperation in the pursuit of sustainable and impactful global energy solutions."

Sebastian Burduja, Romanian minister of energy: "At the official visit to Canada we traced the next steps. We are proud Romania is proving not only top performance in safe operations of our CANDU reactors at Cernavoda, but also leadership and strategic vision by exploring the production of medical isotopes and heavy water in partnership with Canada, being able to directly contribute to public health. It is a significant step toward helping to improve the health of millions of people around the world and demonstrate the multiple benefits of nuclear power plants: besides being a source of clean energy, contributing to energy stability and economic growth, is able contribute to cancer treatment. Equally important is the project to restart the heavy water production in Romania, an initiative started in the mandate of the former minister, Virgil Popescu. The request for heavy water is growing and Romania can be a strategic player. Romania and Canada give an example to other countries about the important role of nuclear energy. These are innovative projects which Nuclearelectrica has the chance to develop. This partnership comes immediately after the announcement of funding from the Government of Canada for Units 3 and 4. The Romanian-Canadian partnership is one with a long tradition and we have the obligation to develop it together in the future."

Isotopes play an enormous role in medicine, cancer treatment, medical imaging, medical device sterilization, new drug development, neutron research, border security, food preservation, and much more. The heavy water, which CANDU reactors use as a moderator and coolant can also be used in a growing number of non-nuclear applications including pharmaceuticals, medical diagnostics, and next-generation electronics like fibre optics and OLED screens.

Quick Facts:

- Laurentis and its parent company, OPG, are recognized world leaders in nuclear isotopes, produced through CANDU reactors at the Darlington and Pickering nuclear generating stations.
- Nuclearelectrica owns and operates two CANDU units at the Cernavodă nuclear power plant, recognised to be ranked 1st and 3rd internationally in terms of capacity factor, and has plans to develop additional units in the future.
- Laurentis has an established presence in Romania, opening its first office in Bucharest in 2020. There, Laurentis operates through its subsidiary Canadian Nuclear Partners S.A. (CNPSA), and has been active in Cernavoda Unit 1's refurbishment.

- Because of the unique design of CANDU reactors, medical isotopes can be produced without interrupting the generation of clean energy.
- A growing suite of isotopes are currently being produced at OPG's Darlington Nuclear Generating Station, including Molybdenum-99, Helium-3, Heavy Water, and Tritium, with plans underway to produce Cobalt-60 currently also extracted from reactors at the Pickering station.

About Nuclearelectrica

The national company Nuclearelectrica SA is the Romanian national electricity, heat and nuclear fuel company operating under the authority of the Ministry of Energy, with the Romanian state holding 82.49% of the shares and the other shareholders 17.50%, after the company's listing on the stock exchange in 2013.

Nuclearelectrica operates two CANDU nuclear units at CNE Cernavoda, which are two of the most efficient units among more than 400 nuclear power plants in the world, a nuclear fuel plant and is in the process of building an integrated fuel cycle through the acquisition of a uranium concentrate processing line to support the company's long-term investment projects.

SN Nuclearelectrica SA has a major role in supporting Romania's objectives by increasing Romania's nuclear power generation capacity by 2030. SNN's strategic investment projects are estimated at over €12 billion: refurbishment of Unit 1, commissioning of Units 3 and 4, development of the small modular reactor project in cooperation with the US company NuScale Power.

These will contribute clean energy to Romania's energy security, energy independence, consumer protection and decarbonisation targets. At the same time, SNN projects can help support energy security in the region.

Nuclearelectrica

About Laurentis Energy Partners

Laurentis Energy Partners, a subsidiary of Ontario Power Generation, delivers cutting-edge and reliable nuclear energy solutions for clients globally. With a commitment to excellence and innovation, Laurentis offers expertise in inspections, refurbishment and engineering, nuclear materials sorting and recycling, the production of nuclear isotopes, and the advancement of small modular reactors. Laurentis has offices in the Greater Toronto Area, Hamilton and Bruce County in Ontario, Saint John in New Brunswick, Regina in Saskatchewan, and Bucharest and Cernavoda in Romania.

Cosmin Ghita
Chief Executive Officer