

Current Report according to the provisions of ASF Regulation no. 5/2018 on issuers of financial instruments and market operations Report date: 29.09.2023

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: Nuclearelectrica and NuScale Power salute the approval by CNCAN of the Licensing Basis Document (LBD) for the NuScale small modular reactor powerplant with a gross installed power of 462 MWe

SN Nuclearelectrica SA and NuScale Power salute the approval of the Licensing Basis Document (LBD) for the NuScale small modular reactor (SMR) powerplant with a gross installed power of 462 MWe (6 modules configuration, each with 77 MWe per module) by the Romanian National Commission for Nuclear Activities Control (CNCAN). Following a comprehensive evaluation, CNCAN issued the official approval letter in August 2023, as confirmation of the Licensing Basis Document (LBD) conformity with the national regulatory requirements.

The approval of the Licensing Basis Document (LBD) represents a key milestone of the Small Modular Reactor Project, which will facilitate the implementation of the licensing process for all the stages of the NuScale Power plant in Romania.

The LBD establishes the licensing requirements for the six-module power plant project, the applicable, both domestic and international, regulatory documents, codes and standards as well as the project characteristics that ensure the fulfilment of the nuclear safety requirements and criteria.

Societatea Nationala NUCLEARELECTRICA S.A.

The LBD maps out the licensing basis of the reference design in the U.S. Nuclear Regulatory Commission Design Certification for NuScale's Standard Plant Design (SPD) and the correspondence with the Romanian licensing requirements and nuclear safety regulations issued by CNCAN in order to establish the authorization framework for all the stages of development of the proposed nuclear power plant project.

Furthermore, the LBD enables the transition towards the next stages of the project, as it establishes the foundation to iniate the second phase of the Front-End Enginerring and Design (FEED) study. CNCAN's approval of the LBD is providing a licensing plan to meeting critical milestones of the project - *siting, construction, commissioning and operation.*

Currently, RoPower and NuScale are carrying out FEED Study phase 1, which consists of a series of engineering and design activities and studies, technical analysis of the preferred site which is the former Doicești power plant, estimation of the calendar and costs. During the FEED study, recommendations of the International Atomic Energy Agency (IAEA) are also applied, following the IAEA Site and External Events Design (SEED) mission carried out in August 2022, at the request of Nuclearelectrica.

"The approval of the LBD by CNCAN, following a complex and thorough assessment process specific to a nuclear regulator, reveals NuScale's strong commitment and high responsibility level towards regulatory compliance and project timeline. For us, at Nuclearelectrica, it is a further, independent confirmation of a solid, safe and reliable SMR technology and a further motivation to continue the deployment of a SMR technology project that will reshape the role of nuclear energy in the economy." - Cosmin Ghita, Chief Executive Officer Nuclearelectrica

"This is an important step forward in our journey to bringing our clean, reliable technology to Romania to help power the country," said John Hopkins President and Chief Executive Officer of NuScale.

"As the first and only SMR technology to be approved by the U.S. NRC, we are proud to see another endorsement of our design's superior safety case by the Romanian National Commission for Nuclear Activities Control."

Romania, through the project company RoPower, founded by Nuclearelectrica and Nova Power & Gas (part of the E-Infra Group), is the first country in Europe and the second in the world, after the United States to take the first steps toward the implementation of NuScale's SMR technology with a 6-module plant and an installed capacity of 462 MWe within this decade.

About Nuclearelectrica

The National Company "Nuclearelectrica" SA (SNN) 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.

SNN operates two CANDU nuclear units through Cernavoda NPP, which are two of the most high-performance units among the more than 400 nuclear plants in the world, based on capacity factor. SNN also operates a nuclear fuel factory (Pitesti Nuclear Fuel Factory) and has an

integrated fuel cycle through its uranium concentrate processing line (Feldioara Uranium Concentrate Processing Factory), recently acquired in order to support the long-term investment projects of the company.

Nuclear electrica 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 CO_2 -free energy production in Romania.

www.nuclearelectrica.ro

Cosmin Ghita Chief Executive Officer