



SNN no. 10332/09.09.2022

**Endorsed,  
Minodor-Teodor CHIRICA  
Chairman of the Board of Directors**

### **Note**

**on the approval by the Ordinary General Meeting of Shareholders and the Extraordinary General Meeting of Shareholders of the Strategy for the implementation of the NuScale Small Modular Reactors (SMR) Project at the Doicești site, the Investors' Agreement for the implementation of this project and some measures related to the Strategy**

#### **I. Competence of approval**

In accordance with the relevant legal provisions in force, the power to approve additional items on the agenda lies with the General Meeting of Shareholders, as follows:

- According to Article 13 - Powers of the General Meeting of Shareholders, para. (2) letter h) of SNN's updated Articles of Incorporation, the Ordinary General Meeting of Shareholders (AGM) approves the "strategy and development policies of the Company". Therefore, the power to approve the Strategy which is the subject of this Note lies with SNN Ordinary General Meeting of Shareholders.
- In accordance with the provisions of art. 13, para. (3) letter o) - the Extraordinary General Meeting of Shareholders (EGM) approves "[...] any other resolution for which the approval of the Extraordinary General Meeting of Shareholders is required", and according to art. 13 para. (4)(c), the Extraordinary General Meeting of Shareholders approves "the establishment or participation in the establishment of companies regulated by the Law Companies Act No 31/1990 [...]".

#### **II. Proposals submitted for approval to the Ordinary General Meeting and Extraordinary General Meeting of Shareholders respectively:**

We submit to the approval of the Ordinary General Meeting of Shareholders:

1. Implementation strategy for the NuScale Small Modular Reactor (SMR) Project at the Doicești site.

We submit to the Extraordinary General Meeting of Shareholders for approval:

1. Agreement of the Investors in relation to the establishment of a new legal entity, organised as a joint stock company, with the objective of developing the NuScale Small Modular Reactor (SMR) Project on the Doicești site.
2. The participation of the National Company "Nuclearelectrica" S.A. in the establishment of a new legal entity, organized as a joint stock company, in accordance with the provisions of the Investors' Agreement and under the conditions described in the Note presented to the shareholders.
3. Mandate the General Manager of the National Company "Nuclearelectrica" S.A. to sign the Investors' Agreement and the Articles of Incorporation of the newly established company, in the name and on behalf of the National Company "Nuclearelectrica" S.A..

**Societatea Nationala NUCLEARELECTRICA S.A.**

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4. Mandate the General Manager of the National Company "Nuclearelectrica" S.A., with the possibility of transferring the mandate, to initiate and carry out the necessary steps for the registration of the project company, including signing any document in connection with the registration of the project company with the Trade Register.

**Appendix:**

1. Appendix 1\_IMPLEMENTATION STRATEGY OF THE SMR PROJECT
2. Appendix 2\_INVESTORS' AGREEMENT on the establishment of a project company with the objective of developing electricity generation capacities\*
3. Appendix 3\_ARTICLES OF INCORPORATION of the project company with the objective of developing electricity generation capacities\*

**Cosmin Ghiță**  
**Chief Executive Manager**

**Laura Constantin**  
**Corporate Services Deputy General Manager**

**Melania Amuza**  
**Commercial and Development Deputy General Manager**

**Dan-Niculaie Faranga**  
**Chief Financial Officer**

\*) may be consulted by shareholders upon request and signature of a Non-Disclosure Agreement

## APPENDIX NO. 1 - SMR PROJECT IMPLEMENTATION STRATEGY

### 1. *Short description of the SMR Project. Milestones.*

**The Small Modular Reactor (SMR)** project consists of the completion and commissioning of **six NuScale Power Module NPM™** modular units on the site of the former Doicești thermal power plant, with a gross installed capacity of 462 MWe (**6 x 77 MWe**).

#### *Milestones:*

- March 2019, Nuclearelectrica and NuScale signed a Memorandum of Understanding (MOU) to evaluate the development, licensing and construction of a NuScale SMR in Romania;
- 9 October 2020 - Romania signed an Intergovernmental Agreement (IGA) with the US in the field of nuclear energy projects, which was also ratified by the Romanian Parliament, through Law no.199/2021, with broad support and adopted by majority vote. The Agreement provides that "The Parties will cooperate directly [...] in exploring the development and deployment of small modular reactors and advanced reactor technologies";
- October 2020, US Exim Bank expressed, through a MoU (Memorandum of Understanding) with the Ministry of Energy, its interest in financing large investment projects in Romania, including nuclear projects, totaling \$7 billion;
- January 2021, Nuclearelectrica received \$1.2 million in USTDA funding to identify and evaluate potential sites for small modular reactors;
- 4 November 2021, at COP26, NuScale and Nuclearelectrica signed a Cooperation Agreement ("Teaming Agreement") - a roadmap for the implementation of NuScale Small Modular Reactors (SMRs) in Romania (previously approved by SNN Board Decision No. 186/29.10.2021);
- 24 May 2022 - At the Small Modular and Advanced Reactors Workshop Planning IV organised in Bucharest by the US Trade and Development Agency (USTDA) in partnership with the US Department of Commerce:
  - Nuclearelectrica, NuScale and Nova Power & Gas SRL have signed a Memorandum of Understanding for the development of the first Small Modular Reactor (SMR) in Romania on the site of the former Doicești thermal power plant, Dâmbovița county (previously approved by Decision of SNN Board of Directors no. 102/22.05.2022); the tri-party Memorandum of Understanding (MoU) is non-binding, and does not constitute a contractual relationship between the Parties, but merely a declaration of their willingness to work together on the basis of commercially reasonable efforts, by making available, for a period of 2 years (which period may be extended by agreement of the Parties), the site for carrying out assessment, planning and permitting activities which will include, but not be limited to: preliminary engineering activities, project cost estimation studies, site assessment and characterisation (including geotechnical studies), environmental impact assessment, identification of possible project modifications to adapt to site-specific conditions, preparation of supporting documentation for permitting, etc;
  - the partnership with the Polytechnic University of Bucharest to develop a NuScale Energy Exploration Centre ("E2 Centre") was announced to support the capacity building of the next generation of nuclear experts, technicians and operators in Romania. The implementation of the E2 Center is made possible through funding from the US Department of State ("DOS") under the Foundational Infrastructure for Responsible Use of Small Modular Reactor Technology" (FIRST) program.
- 24th of June 2022 - on the occasion of the launch of the "Global Partnership for Infrastructure Initiative" at the G7 Summit, US President Joe Biden announced a \$14 million grant for a new phase of NuScale's small modular reactor development programme in Romania - Preliminary Engineering and Design Studies for the Romanian SMR project;
- June 2022 - SNN's Board of Directors approved SNN's participation in the amount of USD 9 million to co-finance the first phase of engineering and design studies for the SMR site in Romania.

### 2. *Site and technology considerations*

In January 2021, SNN was awarded a \$1.2 million grant from the USTDA to fund a technical assessment to identify and prioritize potential sites in Romania and SMR technologies that can be used on them. As part of the study, preliminary, but highly credible lists of acceptable sites were finalized, a prioritization of acceptable sites and features of SMR technologies compatible with these sites was prepared. The analysis results in a set of preferred combinations of the suitability of multi-modular SMR technologies type (the only advanced technologies, including from a licensing point of view, being those in the USA) for sites with certain characteristics, sites of shutdown or decommissioned coal-fired power plants being preferred.

The Doicesti site is a brown-field site (the former thermal power plant site), thus having the advantage of existing infrastructure, of the land with an established use regime for power plants.

Thus, on the basis of the ranking of technically eligible sites prepared by the consultant and some strategic aspects related to the speed of project implementation (including: advantage of existing infrastructure, usage regime) the Doicesti site was classified as optimal for the development of the project, allowing its rapid start.

Please note that the final investment decision will be taken after the fulfilment of the prerequisites, being conditional on obtaining the necessary permits and approvals, which include the site permit to be issued by CNCAN on the basis of NSN-01 and the subsequent approval by law of the site pursuant to the provisions of Article 5 paragraph (1)<sup>1</sup> of Law No. 57 of 17 March 2006 for the amendment and completion of Government Ordinance No. 7/2003 on the exclusively peaceful use of nuclear energy. In the event that subsequent studies or analyses lead to the conclusion that the Doicesti location is no longer appropriate, SNN may decide to discontinue the project at this site.

The NuScale technology is the only SMR technology to have received approval from a regulatory authority for the project (U.S. Nuclear Regulatory Commission), giving it a competitive advantage (several years technological lead over other technologies), which is also reflected in the detailed design activities, selected manufacturers and construction planning. Another competitive advantage of the NuScale SMR technology is its high degree of modularity (relatively low installed power of each module) which allows for increased flexibility in terms of participation in the regulation of the NES (balancing market) as well as in terms of siting, plant sizing, economic model and financing.

### ***3. Necessity and opportunity of the SMR Project***

Nuclear energy is a sustainable alternative for the development of the energy sector, given the limited resources of energy raw materials and the need for electricity generation without greenhouse gas emissions. The role of nuclear energy becomes even more evident in achieving the ambitious targets for reducing greenhouse gas emissions, while contributing to ensuring energy security and promoting an affordable price to end consumers, as well as facilitating the increase of the country's energy independence.

The draft "Energy Strategy of Romania 2019-2030, with a view to 2050" sets concrete targets, establishes clear directions and defines the benchmarks by which Romania will maintain its position as an energy producer in the region and as an active and important player in the management of regional stress situations; the development of the energy sector is directly proportional to the implementation of strategic investment projects of national interest, the completion of the Small Modular Reactors Project being a priority.

The National Integrated Energy and Climate Change Plan 2021-2030 (PNIESC) foresees the development of a Contracts for Difference (CfD) support mechanism to stimulate investments to facilitate the development of new low-carbon power generation capacity (e.g. nuclear, RES, etc.), thus ensuring diversification of energy sources and flexibility of the national system. The implementation of a CfD mechanism for low carbon technologies requires a complementary legislative and regulatory framework detailing the implementation elements.

According to the National Recovery and Resilience Plan (NRRP), by 2032, the total installed coal/lignite-based power generation capacity (i.e. 4 590 MW) is planned to be decommissioned. In order to achieve this objective, investment in new production capacity is necessary to compensate for the estimated shortfall in conjunction with the forecast increase in energy consumption, with projects for the development of nuclear energy production capacity constituting the largest potential investment in the Romanian energy sector in the coming decades, according to the Romanian Energy Strategy.

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<sup>1</sup> The siting of nuclear power and research reactors as well as final repositories for radioactive waste and spent nuclear fuel is approved by law, based on the National Nuclear Development Strategy and the licences issued by the regulator.

***Economic and social impact (6 modules, installed capacity 462 Mwe):***

- It will create 193 permanent jobs;
- 1500 jobs during construction;
- 2300 manufacturing jobs;
- Decrease CO2 footprint by 4 million t/year.

***Opportunities:***

- Romania regional leader: coagulation of a local supplier chain - production/assembly hub and NuScale advanced manufacturing hub to Central and Eastern European countries;
- SNN-regional NuScale technology operator;
- Regional training centre of excellence: implementation of a NuScale simulator at Politehnica University Bucharest and launch of regional training programmes.

***II.4. Implementation strategy. Establishment of a project company***

International practice indicates that it is necessary to allocate significant financial resources ("high risk capital") in the preparatory/pre-project phase in order to adequately define a nuclear power plant project in a way that allows the final investment decision (FID) to be made.

**Project Stages**

The Project development and implementation modality, taking into account international best practices in the field (to allocate significant funds in the preparatory/pre-project phase in order to adequately define the project in a way that allows a final investment decision to be made), envisages the establishment of a dedicated project company, through which the Project will be structured in distinct development stages, as follows. These stages have been developed with the help of the NuScale and Fluor teams and represent an estimate at this stage. As studies progress, they may change.

**Phase 1 - FEED Phase 1 (Period: 2022 -2023)**

Phase 1 of FEED (Front-End Engineering and Design) is a phase of planning, studies, engineering and design activities that contain essential elements of Project definition, in relation to the conditions of the former Doicesti site, and applicable national and international permitting and regulatory requirements. They will provide the quantitative information necessary for the rigorous planning of the activities and an informed estimate of the project costs. It will detail the impact of the Romanian requirements and the Doicesti site on the Project. In parallel, geotechnical studies will be initiated, the Licensing Basis Document ("LBD") will be developed, the contract for the preparation of the Environmental Impact Assessment will be awarded and various notifications to the relevant authorities will be initiated.

**Phase 2 - FEED Phase 2 (Period: 2023 -2024)**

Phase 2 of the FEED will develop the elements of Phase 1 of the FEED and, in addition, will involve a detailed definition of the project scope. The cost estimates will reach Class-3 level of accuracy and will bring the project to the stage of readiness for launch of orders. During this period, the project financing details, state aid notification, initial IAEA analysis, notification under Article 41 of the Euroatom Treaty will be established. At the end of this phase the "final investment decision" takes place.

**Stage 3 - Engineering, Initial Procurement Phase, Site Preparation (Period: 2024 -2026)**

In this phase the documentation for obtaining the construction permit is submitted, the Environmental Impact Assessment is prepared, the mobilisation on site and the site preparation takes place. NuScale Power Modules manufacturing starts and the detailed design is largely completed. In-depth excavations and other essential construction works are also carried out. Some activities extend beyond April 2026 and overlap with later phases of the project; these include the completion of the reactors and water tank walls.

**Phase 4 - Construction (Period: 2026 -2029)**

This phase begins with the "Full Notice to Proceed" decision gate and contains the majority of construction activities.

#### **Stage 5 - Commissioning (2029)**

In this stage the NuScale modules are installed and fuel loading and inspection takes place. Work on the 6 modules is delayed to approximately 1.5-2 months.

#### **Stage 6 - Commercial Operation (2029 -2030)**

This phase starts with the first day of energy sales to the market, energy produced by module 1. In the following months the other 5 modules are gradually launched.

### **4.Considerations on shareholding structure and investment strategy**

#### **Shareholding of the project company**

The first step for the development of the Project is the establishment of a new company, organised as a joint stock company, for the development of the Project ("project company").

At the time of the establishment of the Project Company the shareholding of the Project Company will be 50% SNN and 50% Nova Power and Gas SRL ("NPG"), the owner of the land in Doicesti. The initial share capital of the project company will be EUR 2 million.

SNN and NPG propose to start with equal ownership in the project company, and the capital structure of the project company will evolve, if necessary, according to the investment plan to be founded and agreed for the project. This investment plan will include the investment budget and timetable, and the shareholders will agree on the amounts they propose to invest and the ways in which they will finance the project.

The equal shareholding in the shareholding of the project company makes it possible to create a stable and balanced decision-making structure and minimises the risk of strengthening the project company's indebtedness at SNN level with adverse consequences for the possibility of SNN to attract bank financing for the development of SNN's investment projects. The equal ownership structure, 50%-50%, also allows for a quick start of the project.

SNN and NPG are considering attracting new investors to the shareholding of the project company in order to finance the project. It is anticipated that attracting new investors to the project will probably entail a reduction in the shareholding of the original shareholders in the project company.

The co-option of other investors into the project company's shareholding also further secures the project financing. For example, if, for various reasons, the project company is unable to secure project financing, a new shareholder could take over the financial support of the project, either through its own capital or by co-opting other investors.

#### **Presentation Nova Power & Gas. Partnership synergies**

From the analysis of public and company data, Nova Power & Gas is a diversified energy company: solar energy producer, natural gas power plant energy producer, natural gas distribution concession holder and operator, supplier of electricity and natural gas to industrial and domestic consumers, and developer of power generation capacity, with more than 15 years of experience. According to the information held, Nova Power & Gas is part of the Electrogrup Infrastructure Group ("E-INFRA"), a 100% Romanian owned company with a history of 25 years, present in the construction (EPC) of energy, civil and telecommunications infrastructure, through its subsidiaries Electrogrup and WESEE, and owner of critical infrastructure in the telecommunications sector, through its subsidiaries Nectcity and Direct One.

Through the association with the E-INFRA group, SNN benefits from the contribution of an experienced partner in the construction, design and approval of energy infrastructure, which complements SNN's expertise in nuclear operations.