



SNN no. 2298/February 24<sup>th</sup>, 2021

Approved,

**PhD. Engineer Teodor Minodor CHIRICA**  
**Chairperson of the Board of Directors of SNN**

### **Note**

**on the approval by the Ordinary General Meeting of the Shareholders of the Strategy to continue the Project for Units 3 and 4 of Cernavoda NPP and the approval by the Extraordinary General Meeting of the Shareholders of some measures aimed at initiating the implementation of the Strategy to continue the Project for Units 3 and 4 of Cernavoda NPP and re-operationalization of SC EnergoNuclear S.A.**

#### **1. General Aspects / Powers of Approval**

By Resolution no. 8/June 12<sup>th</sup>, 2020 of the Extraordinary General Meeting of the Shareholders of SNN, the shareholders empowered the Board of Directors to initiate the necessary steps for the analysis and crystallization of the strategic options on the construction of new energy production capacities from nuclear sources.

The strategy to continue the Project for Units 3 and 4 of Cernavoda NPP (the "Strategy") was developed based on the "Feasibility Study for the completion of the project for Units 3 and 4 of Cernavoda NPP", updated in December 2020, within EnergoNuclear S.A. ("EN"), a company dedicated to this project, having the legal regime of a subsidiary 100% owned by SNN.

According to the provisions of art. 13 – Duties of the General Meeting of the Shareholders, par. (2) let. h) of the updated Articles of Incorporation of SNN, the Ordinary General Meeting approves “the development strategy and policies of the Company”. Consequently, the power of approval of the Strategy that this note refers to rests with the Ordinary General Meeting of the Shareholders of SNN. At the same time, the approval of the measures derived from the implementation of the Strategy, including on the amendments to the Articles of Incorporation of SNN, rests with the Extraordinary General Meeting of the Shareholders of SNN.

#### **2. Updated Feasibility Study of the Project of Units 3 and 4 CNE Cernavodă (“SF”)**

In December 2020, within EN, the update of the "Feasibility Study for the completion of the project for Units 3 and 4 of Cernavoda NPP" (**Annex 1 - Updated Feasibility Study**) was completed, by the Association Deloitte and Kinectrics, the conclusion of SF being that the Project for Units 3 and 4 (the “Project”) is financially sustainable, the cash flow requirements being met.

In order to update the costs of the Project, at this stage, the team of consultants developed a methodology representing a combination of expert judgment technique ("expert judgment") and analogic estimation technique, followed by the application of statistical indicators of indexation, structured by geographical area/country of origin, for engineering, procurement, and construction costs.

**Societatea Nationala NUCLEARELECTRICA S.A.**

65, Polona Street, 1<sup>st</sup> District, 010494, Bucharest, Romania; Tel. +4021 203 82 00, Fax +4021 316 94 00;

Running number with the Trade Register: J40/7403/1998, Sole Registration Code: 10874881,

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

[office@nuclearelectrica.ro](mailto:office@nuclearelectrica.ro), [www.nuclearelectrica.ro](http://www.nuclearelectrica.ro)

The updated values of the investment costs (in 2020 prices) of existing assets (land, existing buildings, equipment) as well as heavy water stock have been calculated by applying different methods appropriate to the type of asset (market comparison, for land and heavy water, and net replacement cost, for buildings and equipment). An indication of value based on net book value for existing assets was also taken into account in the financial analysis scenarios.

Based on the conclusions and recommendations of SF, the Strategy to continue the Project for Units 3 and 4 of Cernavoda NPP (the "Strategy") was elaborated, presented below.

**The updated Feasibility Study can be consulted by the shareholders at the headquarters of the company, after signing a non-disclosure agreement.**

### **3. Strategy for continuing the Project of Units 3 and 4 of Cernavodă NPP (the "Strategy")**

#### **3.1 Project of Units 3 and 4 of Cernavodă NPP. Brief Description. Milestones**

The Project of Units 3 and 4 of Cernavodă NPP consists in completing and commissioning **two CANDU 6-type units** on the Cernavodă NPP site, with an installed capacity of minimum **2 x 724 MWe**. The existing structures for Units 3 and 4, specific to and usable exclusively in a CANDU 6-type nuclear power plant, mainly consist of civil engineering structures, such as the reactor building, the turbine-generator building and the hydrotechnical circuit structures which are in various stages of completion and will continue to be used for the construction of the plant.

Project Milestones:

- The Romanian Government received in November 2010 the favorable Opinion of the European Commission issued in compliance with Article 43 of the EURATOM Treaty, on the completion of Units 3 and 4 of Cernavodă NPP, confirming the application of the technical criteria and nuclear safety in force at the European level;
- Over the period 2010 - 2011, AECL (currently CANDU Energy Inc., the owner and developer of the CANDU technology, on behalf and on account of the Canadian state, and, at the same time, the design authority) made a detailed technical assessment of the existing constructions on site, following which it was determined that these may be used to continue the Project;
- The project will include a number of amendments, including those resulting from key lessons learned from the Fukushima accident in March 2011. Thus, the Project meets the nuclear safety requirements applicable to new generation reactors.
- EN, the project company 100% owned by SNN, has prepared, together with specialized consultants, the nuclear safety and engineering studies (seismic risk analysis, safety assessments following the Fukushima accident, probabilistic safety assessments, seismic assessment of major equipment, preliminary decommissioning plan, radioactive waste management strategy);
- The "Basic Authorization Documents" and the Security Design Guidelines for the two units, defining the technical authorization requirements, have already been approved by the National Commission for Nuclear Activities Control (CNCAN). The comfort letter issued by CNCAN in the month of May 2012 confirms that fact that the project can be authorized;
- Government Decision no. 737/2013 on the issue of the Environmental Agreement for the Project „Continuation of the construction and completion works of Units 3 and 4 at Cernavoda NPP" approved the Environmental Permit for the Project, in accordance with the provisions of the applicable international, European and national law;
- In the year of 2019, within the SNN, the "Study on the supply of cooling water for the operation of 4 units on Cernavoda NPP site" was carried out, taking into account, as a possible solution, the implementation of a dam on the Bala Branch on the Danube. The conclusions of the study indicate that the implementation of this project will provide the cooling water necessary for the operation of the 4 units;
- In the year of 2019, within the SNN, the "Nuclear Safety Study on the manner in which the Project of Units 3 and 4 meets the requirements of the Nuclear Safety Directive 87/2014 (DSN)" was received. Based on the analyses and findings resulting from the engineering assessment, the study developer - Candu Energy Inc., CANDU technology owner and design authority - concludes that the Project for Units 3 and 4 of Cernavoda NP, along with the project alterations and the extended

nuclear safety analysis recommended, meets the requirements of the Nuclear Safety Directive 87/2014.;

- In 2020, following the mandate granted by the shareholders, in June 2020, to the Board of Directors of SNN, to initiate the necessary steps for the analysis and crystallization of strategic options for the construction of new energy production capacities from nuclear sources, the necessary measures were adopted for financing, contracting and elaborating, within EN, the update of the Feasibility Study elaborated in 2012; the Feasibility Study for the completion of the updated project of Units 3 and 4 of Cernavoda NPP was received in December 2020.

The project will be developed in accordance with the regulations in the nuclear field in Romania and the European Union, in order to meet the requirements of Romania in terms of nuclear safety, for the protection of personnel, population, environment and property, and will also be developed in compliance with the nuclear agreements and international conventions that Romania is part of.

### **3.2 *Necessity and opportunity of the Project for Units 3 and 4 of Cernavodă NPP***

Nuclear energy is a sustainable alternative for the development of the energy sector, given the limited resources of energy raw materials, as well as the need to obtain electricity that does not produce greenhouse gas emissions. The role of nuclear energy becomes even more evident in achieving ambitious targets for reducing greenhouse gas emissions, while providing the energy security and an affordable price to the final consumers, as well as increasing the energy independence of the country.

The Draft of the Romanian Energy Strategy for the period 2019-2030 and Outlook to 2050 proposes concrete targets, sets clear directions and defines the milestones through which Romania will maintain its position as energy producer in the region, and as an active and important player in managing stress situations at regional level; the development of the energy sector is directly proportional to the accomplishment of strategic investment projects of national interest, the completion of the Project for Units 3 and 4 of Cernavoda NPP being a priority.

The Integrated National Energy and Climate Change Plan 2021-2030 (INECCP) sets out the development of a support mechanism such as Contracts for Difference (CfD) to stimulate investment, in order to facilitate the development of new low-carbon power generation capacities (e.g.: nuclear, RES etc.), thus providing the diversification of energy sources and the flexibility of the national system. The implementation of a CfD mechanism for low-carbon technologies requires the existence of a complementary legislative and regulatory framework detailing the elements of implementation.

At the same time, the completion of the Project for Units 3 and 4 of Cernavoda NPP considers the capitalization of the existing assets, having a considerable value, in the public patrimony - heavy water and uranium octoxide - and, respectively, in the SNN patrimony - land, buildings, equipment etc. - and EN - intangible assets etc., within the terms of the law.

### **3.3 *Manner of implementation of the Project for Units 3 and 4 of Cernavodă NPP***

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

In order to restart the Project, taking into account the good international practices in the field (to allocate significant funds in the preparatory/pre-project phase in order to properly define the project in a way that allows a final investment decision), the implementation method envisaged by the Strategy consists of a staged approach, respectively the division of the Project in **3** distinct **stages** of development, as follows:

- **Stage 1 - Preparatory Stage - Preliminary Notice to Proceed (Pre-LNTP)**, with an estimated budget of 15 million Euros, which will be financed by SNN, by corresponding increase of the share capital of EN, and an estimated duration of 24 months. The main goals of this phase are: re-operationalization of the EN project company, contracting technical, legal and financial assistance services, contracting engineering services to update the Technical Procurement Specification (BIS),

launching, selecting and awarding the IPC Engineering, Procurement and Construction Contract in two phases (Phase 1 - Preliminary Works - Limited Notice to Proceed and Phase 2 - Project implementation - Issue of the Final Order to Start the Works - Final Notice to Proceed). Within this stage, any other studies/reports/valuations necessary for the configuration of the project within the limits of the budget related to this stage will be contracted.

*Note. In order to optimize the schedule of preparatory works, SNN, as owner of the assets that will be brought as contribution in kind, will contract engineering services for the elaboration of the technical study (project amendments, deterministic / probabilistic nuclear safety tests, etc.) for confirmation of the compliance of the Project with the requirements of Nuclear Safety Directive 87/2014 (DSN). This study shall have contributed in kind to the share capital of EN.*

- **Stage 2 - Preliminary Work (Limited Notice to Proceed - LNTP) - Phase 1 of IPC Contract**, having an estimated duration of 18-24 months. The goals of this stage are the development, by the CPI Contractor, of the critical engineering part of the Project, of the nuclear safety documentation and of the tests on the local market of the suppliers of equipment and services necessary for the implementation of the construction works, so that the total price of the Project would be of a fixed/firm type for a considerable percentage of the necessary works and services. Also, at this stage, the nuclear safety documentation necessary to obtain the Nuclear Safety Authorization will be developed, as well as the project notification documentation to the European Commission based on Article 41 of the EURATOM Treaty. At the end of this stage, the feasibility of the Project will be re-analyzed based on the new technical-economic indicators and the **Final Investment Decision** will be taken, which will allow the Project to move to **Stage 3**.

A number of **conditions** must be met in order to make the Final Investment Decision, including obtaining the necessary authorizations from the European Commission for support measures and structuring and closing the financing package for the Project.

- **Stage 3 - Construction (Issue of the Final Notice to Proceed (FNTP) - Phase 2 of the CPI Contract**, with an estimated duration of 69 - 78 months (completion U3 - 2030/ completion U4 - 2031), consisting in the effective start of the construction, assembly, and commissioning works.

### **3.4 Structuring the Project of Units 3 and 4 of Cernavodă NPP. Principles**

The timing of pre-project activities, proposed by the Strategy, must be corroborated with the timing of availability and adoption of decisions within the Romanian Government on the implementation of support mechanisms, meaning that the structuring of the project is based on the following **principles**:

- 3.4.1 The project will be developed and implemented by EN, established as a joint-stock company, of the "project company" type, registered in Romania in accordance with the Romanian Companies Law.
- 3.4.2 The Romanian state and SNN will explore the financing options in order to structure and close the financing package of the Project.
- 3.4.3 EN will be responsible for providing the implementation of the activities for the development of the Project, as there are certain fundamental decisions related to the Project, requiring a high level of supervision and control.
- 3.4.4 In order to reinforce the decision-making process necessary for the implementation of the Strategy on, but not limited to, planning, development budgets, funding issues, etc., the prior consultation of the Strategic Steering Committee will be considered for the implementation of the Project for Units 3 and 4 of Cernavoda NPP, established by the Decision of the Prime Minister no. 281/July 14<sup>th</sup>, 2020, as amended by the Decision of the Prime Minister no. 20/January 6<sup>th</sup>, 2021.
- 3.4.5 SNN will contribute in kind to the share capital of EN the assets related to the Project, registered in accounting as "fixed assets in progress", assets including the land, the existing civil structures, stock of equipment and materials, the amount of 75 tons of heavy water, supporting technical

studies developed to obtain permits and approvals from the European Commission related to the Project.

- 3.4.6 The Romanian State will contribute in kind to the share capital of EN by the amount of heavy water necessary to supplement the initial inventory and the amount of uranium octoxide related to the first nuclear fuel load, wherefore, by the date of the Final Investment Decision, the Romanian State will communicate the quantities, terms and conditions of the contribution, agreeing that the value of these assets - heavy water and uranium oxide - will be determined by an independent appraiser, according to the legal provisions.
- 3.4.7 As a precondition for making the Preliminary Investment Decision and moving to Stage 2 of the Project, it is necessary to conclude an Agreement between the Romanian State and SNN, establishing the responsibilities of the parties in terms of the financing, adoption of support mechanisms and providing the conditions of infrastructure to complete and operate the Project.

\* \* \* \*

#### **4. Amendment of some provisions in the Articles of Incorporation of SNN**

In order to implement the Strategy, specifically in the sense of easing and streamlining the corporate decisions related to the re-operationalization of EN, a change in the duties of the Extraordinary General Meeting of SNN Shareholders is required, in terms of the approval of the mandate of SNN representatives in the General Meeting of the Shareholders of EnergoNuclear S.A., as follows:

"Article 13 par. (3) letter o) paragraph 2 in the Articles of Incorporation of SNN, updated, is removed and, at the same time, article 13 par. (3) is supplemented by a new letter p), reading as follows:

*p) approving the mandate of the representatives of Nuclearelectrica in the General Meeting of Shareholders of S.C. Energonuclear S.A. for:*

- i. dissolution and liquidation of Energonuclear S.A.;*
- ii. making any investment by S.C Energonuclear S.A exceeding 50,000,000 euros (fifty million euros) for a single transaction and/or exceeding 50,000,000 euros (fifty million euros) cumulated with other transactions in any financial year;*
- iii. conclusion by S.C Energonuclear S.A of any contract involving costs or taking any important obligations by S.C Energonuclear S.A exceeding 50,000,000 euros (fifty million euros), individually or cumulated, in a single financial year;*
- iv. any effective or proposed sale, any other alienation or any assets or rights of S.C Energonuclear S.A, any effective or proposed acquisition of assets or rights by S.C Energonuclear S.A exceeding the cumulated amount of 50.000.000 euro (fifty million euro);*
- v. contracting S.C. Energonuclear S.A. of any types of loans or debts or obligations assimilated to loans, with a value exceeding EUR 50,000,000 (fifty million Euro)."*

Likewise, art. 20 par. (3) let. s) in the Articles of Incorporation of SNN, updated on September 24<sup>th</sup>, 2020, according to which the Board of Directors of SNN *approves the mandate of Nuclearelectrica representatives in the General Meeting of Shareholders of the project company established according to the Investors Agreement in Preliminary Form regarding Units 3 and September 24<sup>th</sup>, 2020 at Cernavoda NPP concluded between China General Nuclear Power Corporation and CGN Central and Eastern Europe Investment (RO) CO S.A. and Societatea Nationala Nuclearelectrica S.A. is repealed/removed.*

#### **5. Proposals for approval**

Considering the previously presented aspects, in virtue of the provisions of art. 13 – Duties of the General Meeting of the Shareholders, par. (2) let. h) and of art. 13 par. (3) let. o) in the updated Articles of Incorporation of SNN, we submit the following to the approval of the General Meeting of the Shareholders:

#### **The Ordinary General Meeting of the Shareholders**

1. Approval of the Strategy for continuing the Project of Units 3 and 4 of Cernavodă NPP

## **The Extraordinary General Meeting of the Shareholders**

1. Approval of the share capital increase of EnergoNuclear S.A. by the amount of RON 25 million and, at the same time, the approval of the participation of Societatea Nationala Nuclearelectrica S.A. upon the increase of the share capital of EnergoNuclear S.A., the subsidiary wholly owned by Societatea Nationala Nuclearelectrica S.A., by the amount of RON 25 million.
2. Approval of the mandate of the representatives of Nuclearelectrica in the Extraordinary General Meeting of the Shareholders of Energonuclear S.A. to vote in favour of the amendment of the share capital of EnergoNuclear S.A., in the sense of increasing it by the amount of RON 25 million, and, at the same time, approving the mandate of the representatives of Nuclearelectrica in the Extraordinary General Meeting of the Shareholders of EnergoNuclear S.A. to vote in favour of the full subscription, by the sole shareholder of EnergoNuclear SA, respectively Nuclearelectrica, of the additional (increased) share capital, of RON 25 million, in the form of cash contribution of Nuclearelectrica to the share capital of EnergoNuclear SA, in amount of RON 25 million.
3. Empowering the SNN Board of Directors to initiate, conduct and approve the procedures, operations and corporate decisions necessary to increase the share capital of EN, operationalize EN and provide the necessary resources, in accordance with the Strategy approved by the Ordinary General Meeting of the SNN Shareholders.
4. Approval of the support, by SNN, via the EN company, the wholly owned subsidiary of SNN, of the expenses generated by Stage 1 of the Project for Units 3 and 4 of Cernavoda NPP, in compliance with the provisions of the approved Strategy, provided that it fits into the income and expense budget approved according to the legal provisions.
5. Approval of the amendment of the Articles of Incorporation of SNN, as follows:
  - (a) Article 13 par. (3) letter o) paragraph 2 in the Articles of Incorporation of SNN, updated on September 24<sup>th</sup>, 2020, is repealed/removed.
  - (b) Article 13 par. (3) is supplemented by a new sub-section, lettered „p”, reading as follows:

*p) approving the mandate of the representatives of Nuclearelectrica in the General Meeting of Shareholders of S.C. Energonuclear S.A. for:*

    - i. dissolution and liquidation of Energonuclear S.A.;*
    - ii. making any investment by S.C Energonuclear S.A exceeding 50,000,000 euros (fifty million euros) for a single transaction and/or exceeding 50,000,000 euros (fifty million euros) cumulated with other transactions in any financial year;*
    - iii. conclusion by S.C Energonuclear S.A of any contract involving costs or taking any important obligations by S.C Energonuclear S.A exceeding 50,000,000 euros (fifty million euros), individually or cumulated, in a single financial year;*
    - iv. any effective or proposed sale, any other alienation or any assets or rights of S.C Energonuclear S.A, any effective or proposed acquisition of assets or rights by S.C Energonuclear S.A exceeding the cumulated amount of 50.000.000 euro (fifty million euro);*
    - v. Contracting, by S.C. Energonuclear S.A. of any types of loans or debts or obligations assimilated to loans, with a value exceeding EUR 50,000,000 (fifty million Euros). ”*
  - (c) Art. 20 par. (3) letter s) in the Articles of Incorporation of SNN, updated on September 24<sup>th</sup>, 2020, is repealed/removed.

**Cosmin Ghiță**

**Dan Laurențiu Tudor**

**Paul Ichim**

**Chief Executive Officer**

**Deputy Chief Executive  
Officer**

**Chief Financial Officer**

