

MINISTER'S CABINET

No. DGEICPSC/126579.04.03 .2025

To: Ministry of Environment and Water of the Republic of Bulgaria

In att: Mr. Manol Genov, Minister

Dear Minister Genov,

The Ministry of Environment, Waters and Forests of Romania sends cordial greetings to the Ministry of Environmental Protection of the Republic of Bulgaria and particularly appreciates the bilateral cooperation in the field of environmental protection.

We would like to express our gratitude for being notified under article 3 of the Convention on environmental impact assessment in a transboundary context (the Espoo Convention) regarding the proposed project "Construction of unit 8 of Kozloduy NPP".

As stated in our letter no. DGEICPSC/126526/18.02.2025, Romania will participate in the transboundary environmental impact assessment procedure regarding the proposed project "Construction of unit 8 of Kozloduy NPP".

A complete understanding of the project for building and operating a new nuclear unit at the site of Kozloduy NPP and its possible transboundary impact can only be obtained after a careful examination of the EIA report, which, in accordance to the information available in the notification, will be available towards the end of the current year.

Below we have included several comments and proposals from our side related to the submitted notification as well as information from our side necessary for the preparation of the EIA report. These comments and proposals are the result of the consultation procedure with competent authorities and interested public.

General comments

In section (ii) - the final part of the notification, a reference is made to a map with the location of the project. We specify that this document was not attached, but we expect to find it in the subsequent correspondence regarding the project.

According to the provisions of Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC, in the event that the project site falls under the scope of the Seveso III Directive or hazardous substances that are subject to Annex 1 of the same directive will be present on the site, the Bulgarian party must notify the Romanian party of this situation, ensure public participation in decision-making and make the risk analysis available to the interested public.

Comments regarding the "water" factor

The analysis of the notification submitted by the Bulgarian side identified the following aspects:

- In the paragraph on page 2, it is stated in the "Description of proposed activity (e.g., technology used)" section: "The third circuit consists of the final absorbent of heat the technical and circulation water supply of the unit based on the water from the Danube River and the heat supply unit (for own and domestic needs)" in this context, no data is provided regarding the amount/volumes of water abstracted from the Danube River, which could have potential effects/impact on the Romanian side, especially during drought periods.
- The document (page 3) mentions that the potential transboundary impact will be assessed as the cumulative impact of all facilities on the nuclear power plant site. It is important to emphasize that the cumulative impact on the Danube River (a shared water body between Romania and Bulgaria) must consider not only the pressure exerted by the nuclear power plant but also other anthropogenic pressures (existing, under construction, approved/planned pressures) in accordance with the requirements of the Water Framework Directive and the Environmental Impact Assessment (EIA) Directive.
- The document (page 5) states that the construction of the new unit at the Kozloduy nuclear power plant, which will have an operational lifespan of at least 60 years, will not result in any significant adverse transboundary impact.
- The main water supply source will be the Danube River, and the proposed project unit
 will benefit from the entire existing infrastructure of the Kozloduy plant. Wastewater
 will be collected and sent to the power plant's treatment facility.
- Furthermore, it is mentioned that there is a potential impact from various types of radiation (radioactive or non-radioactive), and possible sources of pollution for aquatic and terrestrial ecosystems could arise from accumulations caused by potential fuel and chemical spills in emergency or accidental situations, however, no details are provided.

Considering that the notification presents only a general description, without having an impact assessment, more comments and observations can be made after receiving the EIA report, which we expect to describe in detail the situation of the potential transboundary impact on environmental components, respectively on water resources and aquatic organisms, monitoring of compliance to the requirements of European water directives, risk situations, and risk management.

Comments regarding "biodiversity"

The various stages of operation, maintenance and decommissioning of a nuclear power plant can lead to risks to ecosystems and species as follows:

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- 1. Water heating: Reactor cooling requires a large amount of water, which is then discharged at a higher temperature back into the water source. This can cause the temperature of the water source to rise, affecting nearby aquatic ecosystems. Higher temperatures can reduce dissolved oxygen in the water and lead to thermal stress on fish and other aquatic organisms, causing mass die-offs or disruption of their behavior and reproduction.
- 2. Radioactive contamination: In the event of a nuclear accident or malfunction, releases of radioactive substances can contaminate soil, water and the atmosphere. This could have devastating effects on biodiversity in both the short and long term. Radiation can directly affect living organisms, and soil and water contamination can affect plants and animals, including fish and animals that consume contaminated water. In addition, radiation can reduce soil fertility and compromise the ability of ecosystems to regenerate.
- 3. Changes to natural habitats: The construction and operation of a nuclear power plant may involve changes to the natural landscape, such as deforestation, land drainage or changes to watercourses. These activities can lead to habitat loss for various plant and animal species, affecting local biodiversity. In particular, freshwater and wetland areas can be severely affected and animals that depend on these ecosystems may be forced to migrate or become extinct.
- 4. Light pollution and noise: Nuclear power plants can emit intense artificial light at night, which can disrupt natural animal behaviors such as migrating, feeding and breeding, especially in bird and insect species. The constant noise generated by plant equipment can also affect sound-sensitive animals such as mammals and birds. They may avoid affected areas or change their nesting and feeding behaviors.

Lighting and noise can affect migratory species. Birds may be disrupted during migration and change migration routes or nesting sites.

5. Accident and radioactive waste: In the event of a major nuclear accident (e.g. Cernobyl or Fukushima), the long-term effects on biodiversity can be devastating. Radiation can cause genetic mutations, malformations and premature death in animals and plants in affected areas. These effects can persist for decades or even centuries, affecting future generations of species.

In addition, radioactive waste from nuclear power plants must be stored safely for very long periods of time. Radioactive waste repositories can affect surrounding soil and water, with negative effects on local ecosystems.

Taking into account that the project uses water from the Danube river, Romanian specialists are of the opinion that the EIA report should include an assessment of the impact on the species that have a common distribution along the border, especially fish species that uses the river to migrate towards the Black Sea, an assessment of the impact on natural protected areas along the Danube river situated on the Romanian side as well as measures to prevent and compensate for possible environmental damage.

For the analysis in relation to the natural protected areas, there is the possibility for the developer to use the information published on the Ministry of Environment, Waters and Forests's website at the address https://www.mmediu.ro/categorie/date-gis/205. At the same time, we inform you that scientific data (species, habitats) can be found in the standard forms published at https://www.mmediu.ro/categorie/natura-2000/476.

Comments regarding "human health"

Our specialists consider that a point of view regarding the impact of the project on human health can be formulated after reviewing the EIA study and the impact study on the health of the population on the territory of Romania within a radius of 30 km around the Kozloduy NPP, including on the waters of the Danube, the area with possible transboundary impact by cumulating the activities of all the nuclear units in the Kozloduy NPP, under normal operating conditions. The specialists also request information regarding the risk of accidents that can have an effect on the health of the population and environment as well as the evaluation of the impact on the environment and on the health of the population on the territory of Romania in case of nuclear emergency situations.

Romanian experts have expressed an interest in consulting the following information, which they believe should be included in the EIA report:

- The chosen PWR design/nuclear power generation technology and the way to secure the main raw materials, in particular the nuclear fuel
- Aspects regarding the strategy for approaching back-end fuel cycle activities and management routes for different categories of radioactive waste, from generation to disposal.
- The source-terms, emissions into the environment and the results of the environmental and human health impact assessment in the transboundary context.

The Kozloduy NPP is made up of 6 units, of which 4 are non-operational units, according to section (ii) point 2 of the notification. Taking into account that the document makes no reference to the status of the 7th unit, and taking into account the proximity of the nuclear powerplant to our country, we believe it is best if the EIA report contains information about this unit and that its impact is also taken into account in assessing the cumulative impact of the project.

The nuclear power plant Kozloduy is considered in the National Nuclear and Radiological Emergency Response Plan, thus, the potential direct radiological impact in the event of a severe accident is identified in the south of Romania. We are interested in receiving detailed information on radiological impact studies and assessment of transboundary radiological consequences, as well as source term calculation data for design basis accidents and severe accidents, as soon as they become available.

As a result of public access to the notification provided through its official website, the Ministry of Environment, Waters and Forests has not received any comments, observations, objections or suggestions from the interested public.

Please accept, Mr. Minister, the expression of my high consideration and esteem.

Mircea FECHET

Minister of environment, waters and forests

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