



REPUBLIC OF BULGARIA

MINISTRY OF ENVIRONMENT AND WATER

OBPL-33
19 October 2022

Subject: *Transboundary environment impact assessment (EIA) procedures for three Romanian projects*

Dear Minister Tánzos,

Thank you for your letter DGEICPC/95014/21.09.2022 concerning the official standpoints of the Ministry of Environment and Water of the Republic of Bulgaria on ongoing transboundary EIA procedures for Romania's projects under Espoo Convention in which Bulgaria is an affected party. We highly appreciate the extended deadline kindly provided by the Romanian side for the submission of our response until the end of October, taking into account the excellent cooperation between our two countries in the field of environment protection.

In view of the above, I had the opportunity to acquaint myself in detail with the circumstances regarding the procedures you have set out and would like to bring to your attention the following information:

With regard to Project “Construction of Heavy Water Tritium Facility (CTRF) at Cernavoda NPP”:

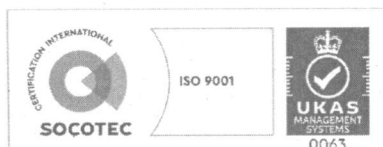
After careful consideration of the EIA Report for the CTRF project and consultations with the competent Bulgarian authorities, we are pleased to inform you of the absence of objections and negative opinions on the EIA Report.

H.E.Mr Barna TÁNCZOS

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In this regard, we would like to express our official opinion of acceptance of the EIA Report, respectively, the implementation of the above-mentioned project, provided that the stipulated measures to prevent, mitigate and compensate to the highest extent the adverse effects on the environment and human health are observed. Therefore, we consider it appropriate the final decision for approval of the implementation of the project to include these measures.

With the greatest respect we would like to request to be notified for the completion of the EIA procedure and approval of the CTRF project. Pursuant to Article 6 of the Espoo Convention, we expect the issued Decision for the Project "Construction of a Heavy Water Tritium Facility (CTRF) at Cernavoda NPP" to be provided to us.

With regard to Project "Refurbishment of Unit 1 of Cernavoda NPP and extension of intermediate dry spent fuel with Macstore-400 modules":

In addition to the letter with ref. No 99-00-99 dated 1st June 2022 of the Ministry of Environment and Water of the Republic of Bulgaria, by which to the Republic of Bulgaria has expressed its willingness to participate in the transboundary EIA procedure for the "Refurbishment of Unit 1 of Cernavoda NPP and extension of intermediate dry spent fuel with Macstore-400 modules" Project, we would like to present our comments and proposals we find appropriate to be included in the scoping document:

- *Although tritium discharges are major components in the cumulative effect of the effective dose to personnel and the population in the area, we find that the contribution of all components of radioactive releases in the environment should be considered and assessed in the EIA procedure (radioactive noble gases, aerosols, I-131, C-14, etc.) and not just tritium as dose determinant.*
- *Data on tritium activity in water from the Danube river after discharge of water from the Cernavoda NPP canal and ground air as the main source of impact should also be presented;*
- *There is no information on the methodology used to estimate the doses of population under normal exploitation, input data and dose models. In view of the fact that Bulgaria is the closest affected country 36 km away from the Cernavoda NPP site, it is recommended to create models for estimation of doses on population for wider radius (up to 50-100 km) covering more settlements on Bulgarian territory;*
- *The notification declares that the projects will not have a significant adverse impact in a transboundary context. An assessment of the impact, even if insignificant, in a transboundary context and the corresponding justification - under normal operation and in an emergency situation - should be presented;*
- *In Annex II, it is claimed that the flora and fauna in the impact area of the Cernavoda NPP will be not affected by the project. At the same time, on page 19, it is concluded that the implementation of the projects will have negligible indirect impact on flora and fauna. The conclusion is supported by various studies and monitoring, some of which are carried out of the Cernavoda NPP in 2008-2012 and 2013-2016. There are no recent studies and monitoring data. In view of this, information in the Terms of reference (ToR) for the scope and content of the EIA should include:*
 - *Description of the indirect impacts on flora and fauna and how it is assessed;*
 - *Current studies and researches on aquatic and terrestrial organisms in the area of influence.*

- In the section “Impact of the water regime quantity and quality”, it is not clear whether a change in the quantities of water intake and discharge is foreseen, as well as information on the methods of treatment of discharged waste waters. There is no data on water surveys and monitoring. In this respect, the scoping document should include information which describes:
 - Whether changes in the quantities of abstracted and discharged water are foreseen;
 - Methods of treatment of discharged wastewater;
 - Water surveys and monitoring.
- There are no proposed alternatives, according art. 5 of the Espoo Convention, which should be included in ToR /EIA Report;
- According to the information provided, the main objective of the project is “To upgrade Unit 1 of the Cernavoda NPP for a new life cycle of approximately 30 years of operation and to expand the dry spent nuclear fuel (SNF) storage with MACSTOR 400 type modules with fuel storage resulting from two life cycles of Unit 1 and Unit 2”. The ongoing transboundary EIA procedure is for project “Refurbishment of Unit 1 of Cernavoda NPP and extension of intermediate dry spent fuel with Macstore-400 modules”. It is necessary to be clarified whether the extension of the operational resource of the Unit 1 of the Cernavoda NPP is included in the scope of the ongoing EIA in a transboundary context.
- The conclusion of insignificant impact in a transboundary context does not extend to the repairs and rehabilitation/modernization of systems in the nuclear and classical parts of the unit foreseen in the first sub-project. The distance from the facility to the nearest point of the border with the Republic of Bulgaria is 36 km and the discharges take place into the Danube River, common for Romania and the Republic of Bulgaria. It is, therefore, necessary to extend the scope and content of the EIA.

In view of the above, the EIA for the project "Rehabilitation of Unit 1 of the Cernavoda NPP and extension of the intermediate dry storage for spent fuel with MACSTORE-400 modules" should contain comprehensive information on potential risk factors and an assessment of the possible transboundary effect of their impact on the quality of individual environmental components and human health. We suggest that the following aspects of these issues be elaborated and addressed in detail:

- Ambient air:

- *The analysis of ambient air quality should include all nearest settlements located in the project area, including the nearest settlements in the Republic of Bulgaria. Mitigation measures for the expected dust and gas emissions should be detailed in the EIA Report.*
- *The assessment of the risk of major accidents and/or disasters should consider the so-called 'worst case scenario'. The report needs to draw conclusions on the possible airborne dispersion of pollutants in the event of an emergency or disaster affecting the sites of the present investment proposal, including the presentation by mathematical modelling of 'scenarios' for the airborne dispersion of a toxic or radiological plume towards the Republic of Bulgaria. Following the identification of possible accidents and disasters, the preventive measures and protective barriers to be provided at the site should be described and conclusions drawn on the areas of impact.*

- Water

- *The EIA report is required to include up-to-date information on the existing drinking water supply to the settlements, water bodies located in the vicinity of the site, water abstraction facilities for drinking water supply and data on the quantity and quality of water supplied for drinking purposes.*
- *An analysis and assessment of the possible impact on natural water bodies used for the supply of water to the settlements, the impact on the relevant sanitary protection zones, the impact on the quantity supplied and the impact on the quality of water for drinking purposes for consumers should be provided.*
- *The report should contain a detailed analysis of the possible "scenarios" for the pollution of the Danube-Black Sea Canal and the Danube as a result of emergency or disaster situations at the site, with mathematical modelling of the distribution of contaminants along the watercourse and an assessment of the likelihood and magnitude of affecting the Black Sea water area, including in relation to Bulgarian territorial waters and coastline.*

- Waste:

- *The operating technology will involve regular separation and storage of industrial waste. The EIA report should describe in a structured way all the types of waste by groups of non-hazardous and hazardous (including radioactive) that will be generated and stored during the refurbishment, construction and operation, to assess their impact on the environment and human health, including in a transboundary context.*

- Physical factors:

- *Detailed development of the sections of the EIA report analyzing the physical factors of the refurbishment, construction and operation activities, including the risk of potential impact on the territory of the Republic of Bulgaria from sources of ionizing radiation, is necessary.*

- Health risk assessment for the population and workers:

- *The EIA report should contain a separate section analyzing the health risk for the population and workers during the renovation, construction, operation and decommissioning of the site by:*
 - *Identification of the potentially affected population and areas, including the distance to the nearest settlements and sites subject to health protection in the territory of the Republic of Bulgaria;*
 - *Identification of the risk factors that could have a potentially harmful effect on the health of the exposed population;*
 - *Characterization of the individual factors in terms of their impact on human health and their comparison with current health standards;*
 - *Assessment of the potential for combined, complex, cumulative and remote effects of the identified factors;*
 - *Health risk assessment, health protection measures and risk management;*
 - *Analysis and interpretation of demographic and morbidity indicators for the regions of the territory of the Republic of Bulgaria. (based on data for the last available 3-5 year period), where the population is likely to be exposed to the impact of the planned activities;*
 - *An assessment of the health status and occupationally-related morbidity of the employees of the Cernavoda NPP, using historical data, taking into*

account the fact that, due to the proximity of the plant, Bulgarian citizens may also work on its territory.

With regard to Project "Neptune Deep"

We would like to express our gratitude to you for notifying us about the "Neptune Deep" Project and at the same time to assure that we will express our official standpoint before the deadline kindly set out in your letter (the end of October).

At this point we can only clarify that after careful consideration of the notification and Neptune Deep Project Presentation Memorandum and taking into account the importance of the project and the location of the offshore project site (in Exclusive Economic Zone) we have identified the need for deeper consultations with Bulgarian authorities in the light of the recent approval of the Maritime Spatial Plan of the Republic of Bulgaria 2021-2035.

Please accept, dear Minister, the assurances of my highest consideration and my readiness for successful future cooperation.

Yours sincerely,



Rositsa Karamfilova-Blagova
Minister of Environment and Water