



REPUBLIC OF BULGARIA

MINISTRY OF ENVIRONMENT AND WATER

OBCL-SS
10 December 2019

Re: Project "Construction of a facility for removal of tritium from heavy water" in the territory of the Cherna voda NPP

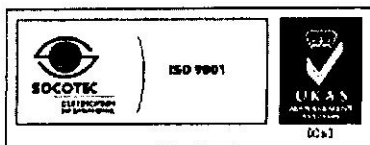
Dear Minister,

In addition to the letter with ref. No OVOS-33/15.11.2019 of the Ministry of Environment and Water of the Republic of Bulgaria, by which we have declared our wish to participate in the transboundary environmental impact assessment (EIA) procedure for the above project, we inform you for the following:

After acknowledging the Notification and the document "Presentation Memoir.Construction works for heavy water tritium removal facility (CTRF)" attached to it, we think that the following questions need to be clarified in the EIA report:

- 1. Have studies been conducted to locate the heavy water tritium removal facility and if so, what studies?*
- 2. Which of the technologies studied will maximize the reduction of tritium exposures in the environment and why?*

H.E.Mr Costel Alex
Minister of Environment, Waters and Forests of Romania
12 Libertatii Blvd.,
Sector 5, Bucharest, Romania



Sofia 100022, Maria Luiza Blvd

Tel: +359 (2) 940 6194, Fax: +359 (2) 986 25 33



3. *Is the cumulative effect of the implementation of the investment proposal envisaged, as it is located near existing nuclear facilities and what approach will be used when examining it?*
 4. *What methodologies will be used to calculate releases of gaseous and liquid tritium into the environment?*
 5. *From the information provided, it is known that the normal operation of the facility is not expected to affect neighbouring countries within the meaning of the Convention. Has an analysis of the expected impact in the case of an accident been carried out?*
 6. *The project envisages the purification of treated waters from impurities and radionuclides other than tritium before transferring them to CTRF (p. 7). We would like to receive more detailed information about the treatment system and what degree of purification is achieved?*
 7. *Radioactive emissions into the environment from the CTRF are discharged through a 50-meter vent tube outside the facility. The project information states that tritium emissions will be emitted, with aerosols and volatile substances possibly presented. It does not indicate what activities are expected to be discarded as a result of the operation of the facility - liquid and gaseous. Such an assessment should be presented in the EIA Report.*
 8. *The dose limit for a representative person from the population as a result of emissions from the CTRF was established by the National Commission for the Control of Nuclear Activities (CNCAN) - 0.010 mSv/y. Information should be provided on what basis this dose restriction is set. According to what is written on page 71 of the document presenting the project, the secondary CTRF discharge limits associated with this dose restriction will be established by the CNCAN licensee after consultation with an RH expert accredited by CNCAN. How is this dose limitation distributed between liquid and gaseous releases from the facility?*
 9. *The document stated that there would be no increase in the annual concentrations of tritium in the environment and that they would be comparable to the concentrations of previous years (p.62). How does this correspond to the idea of a project to reduce tritium emissions into the environment (p.8) and the statement on pages 61 and 63 that its implementation will reduce tritium emissions (by around 20%).*
 10. *The report on the EIA should provide information on the model mathematical programs used to estimate the dose load from gaseous and liquid radioactive emissions during the normal operation of the Cherna Voda NPP. What methodology is used to evaluate the doses and which routes are included in the calculations? Data to be presented from the last 10 years of operation of the plant with the contribution of tritium and carbon-14 to the formation of the dose load of the population in the observed area. How will the reduction of CTRF emissions reflect in the estimates (-%) of the maximum effective individual doses of the population relative to the dose quotas during the operation of Cherna Voda NPP?*
 11. *Although point VII.b) stated at the beginning that the flora and fauna in the area of impact of the Cherna voda NPP would not be affected during the construction and operation of the CTRF, on page 63 it was stated that the project implementation would have a slight negative effect on flora and fauna. The EIA information should describe what this negative effect is and how it is evaluated.*
 12. *The document stated that the project would not have a significant negative impact in a cross-border context (p.70). Impact assessments, even minor ones, in a transboundary context should be presented as well as, where appropriate, the relevant justification - under normal operation and emergency situations.*
-

*In order to continue the cross-border procedure with the participation of the Republic of Bulgaria, it is necessary to provide us with the specification for the scope of the EIA report with the above mentioned remarks and recommendations.
I take this opportunity to express my respect and readiness for fruitful cooperation.*

Sincerely,

NENO DIMOV
Minister Of Environment And Water
