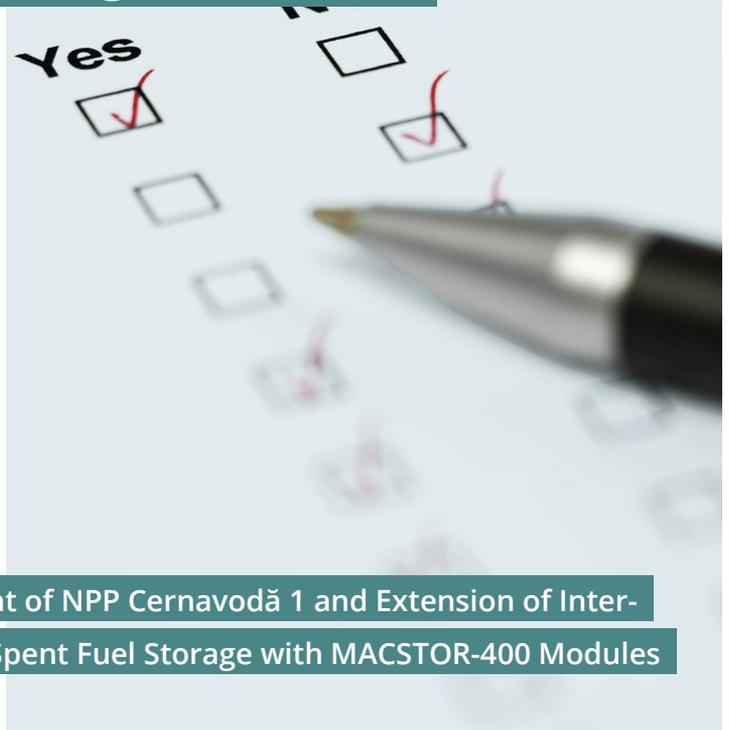


Environment Impact Assessment
NPP Cernavodă 1 and Interim
Waste Storage (Romania)



ENVIRONMENT IMPACT ASSESSMENT NPP CERNAVODĂ 1 AND INTERIM WASTE STORAGE (ROMANIA)

EVALUATION OF ANSWERS

Bojan Tomic
Ioana Popa
Oana Velicu

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Project Manager Franz Meister

Authors Bojan Tomic (Enconet Consulting Ges.m.b.H.)
Ioana Popa (Enconet Consulting Ges.m.b.H.)
Oana Velicu (Enconet Consulting Ges.m.b.H.)

Layout Felix Eisenmenger

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CONTENTS

CONTENTS.....	3
1 EVALUATION OF ANSWERS TO AUSTRIAN QUESTIONS.....	4
2 CONCLUSIONS AND RECOMMENDATIONS	15
3 REFERENCES	17

1 EVALUATION OF ANSWERS

In the course of the evaluation of the EIA report, a total of eleven questions were raised in relation to 5 different areas of interest, ranging from long-term operation to severe accidents and transboundary impacts. Although all of the questions were answered, not all were considered to be technically complete to the extent that a full understanding could be reached. In some of the answers, the information provided was only a repetition of what was already in the EIA report and did not provide any additional information that would help understating the issue of interest.

The following analysis is intended to document the evaluation of the answers received, with emphasis on the additional actions to be taken in order to obtain the necessary clarifications.

Q1) Could you please specify what is the current stage of the DIDR-U5 establishment?

Answer According to the Feasibility Study Report prepared for the Feasibility Study of Radioactive Waste Management in CNE Cernavodă, the Unit 5 building, properly prepared, can be used for the storage of radioactive waste resulting from the refurbishment activities. This solution is based on the assessment of the structural integrity based on the change of purpose of the Unit 5 reactor building for radioactive waste storage (change of the basement and addition of new floors). During the structural integrity assessment, stability (overturning and sliding) and bearing capacity checks were carried out and the requirements were found to be met. No further activities are carried out until the Environmental Agreement and Nuclear Construction Permit are issued as per applicable laws. Thus, the DIDR-U5 unit is currently in conservation.

Evaluation The question has been answered, however the answer raises questions about (1) the availability of the new RW storage facility (DIDR-U5) at the time it is needed, and (2) the need for a separate EIA and operation license.

Conclusion It is suggested to require an additional clarification on these two aspects from the Romanian counterpart.

Q2) Could you please explain if the U1 refurbishment activities will involve the Spent Fuel Storage Pool, and if yes, what will happen with the SNF stored there?

Answer The current national strategy includes the construction of a new surface final repository for low and intermediate level short-lived radioactive waste (LILW-SL) in the DFDSMA. This new repository is planned to be constructed for the disposal of LILW-SL generated from the operation, refurbishment and decommissioning of 4 CANDU reactors at CNE Cernavodă. The National Strategy was approved by Government Ordinance 102/2022 on the basis of the Strategic Environmental Assessment (SEA) procedure which included a transboundary consultation process, under the conditions of the law.

In the year 2023, ANDR obtained by Resolution No. 2 of 16.01.2023 of the Saligny City Council (HCL), the approval of the Urban Development Plan (Plan Urbanistic Zonal - PUZ) and the Local Urban Development Regulations (RLU) for the near surface landfill and for LILW-LL. (DFDSMA). The following documents were the basis for the approval of the PUZ: Geotechnical Study, Traffic Study, Strategic Environmental Assessment Study (SEA procedure) and Sociological Research on the perception of the inhabitants on the intention to realize the DFDSMA on the territory of Saligny Municipality, Constanta County.

Based on the technical documents and studies that have been carried out for the DFDSMA project, ANDR has taken a number of steps and started the procurement process for the Engineering Services for the site and construction permits for the Definitive Disposal for LILW - SL (DFDSMA).

Currently, ANDR is carrying out all the activities necessary to obtain the site authorization for the LLRWMF in the village of Saligny, Constanta County, in accordance with the CNCAN regulations "Norm on radiological safety requirements for radioactive waste disposal" approved in 2019.

Evaluation Question answered satisfactorily.

Conclusion No need for further action.

Q3) Could you please explain if the U1 refurbishment activities will involve the Spent Fuel Storage Pool, and if yes, what will happen with the SNF stored there?

Answer After shutdown of U1 for refurbishment, the irradiated fuel (spent fuel bundles) will be discharged entirely from the reactor's active reactor area into the spent fuel pool (SFB). After discharge from the reactor's active reactor area, the spent fuel bundles are stored under water in the SFB for at least 6 years to be cooled to a radioactive decay power of 6W per spent fuel bundle. After 6 years, the spent fuel bundles are transferred from the BCU to the dry fuel storage facilities (MACSTOR modules). During the implementation of the Unit 1 Refurbishment Project, the BCU will be operated according to the Unit 1 Operating Authorization issued by CNCAN, and the transfer of spent fuel bundles from the BCU to the dry fuel storage facilities will continue according to the spent fuel transfer authorizations issued by CNCAN. In addition, during the execution of the Unit 1 Refurbishment Project, the re-cladding of part of the BCU walls will be carried out without affecting the spent fuel bundles stored in the BCU.

Evaluation Question answered satisfactorily.

Conclusion No need for further action.

Q4) Do the conditions from the EIA procedure have a binding effect on the sub-sequent procedures, in particular the nuclear law procedure? What would happen if, during the EIA consultations, a negative opinion from the public will be received?

Answer According to Law no. 111/1996 on the safe conduct, regulation, authorization and control of nuclear activities, updated and aligned with EU Directives, for the authorization of projects, the Environmental Authorization is issued by the Ministry of Environment after the issuance of the operating permit by CNCAN. The environmental permit, issued by the Ministry of Environment, is however a prerequisite for the site authorization issued by CNCAN.

Any conditions contained in the Environmental Agreement and in the Environmental Authorization are binding for the Permit Holder and their fulfilment will be proven during project implementation.

According to the limits and conditions of the authorizations and Law no. 111/1996, the nuclear regulatory authority must be informed within 7 days of any change in the limits and conditions imposed by the Agreements and Authorizations of other national authorities. In addition, the operating conditions in the authorization issued by CNCAN reinforce the Licensee's obligation to fully comply with the legislation and provisions of other Authorities, applied within a nuclear installation. Thus, retrofitting activities are not permitted until all necessary Agreements and Authorizations are issued.

Evaluation While the first question has been answered, the second question was answered only from the perspective of national consultations.

Conclusion It is suggested to request an additional clarification from the Romanian counterpart, explaining that our interest was related to the external consultation process.

Q5) Please provide the results of the nuclear safety analyses for the refurbishment of Cernavodă NPP U1 and extension of DICA with MACSTOR-400 modules (in case they have been finalized in the meanwhile).

Answer Nuclear safety analyses for U1 operation after refurbishment are planned to be completed by the end of 2027.

The strategic program and the requirements for nuclear safety analyses are aligned with international standards (IAEA, CNSC, COG) and in accordance with national nuclear safety regulations issued by CNCAN.

For DICA MACSTOR 400 and DIDR-U5, according to National Nuclear Regulatory Authority - National Commission for the Control of Nuclear Activities (CNCAN), in accordance with the rules for the authorization of nuclear installations, the licensee will prepare the Nuclear Safety Report as the basis for authorization for each of the different stages of implementation of the investment. These reports are being prepared to support the applications for the Construction Authorizations for DICA MACSTOR-400 and DIDR-U5 respectively.

In accordance with the minimum content required by the licensing rules, the Nuclear Safety Report includes a chapter entitled "Nuclear Safety Analysis Project Basis". In order to apply for Construction Authorization for a project it is mandatory to obtain the Environmental Agreement. Thus, at this stage, activities are underway to prepare the Nuclear Safety Reports for each of the sub-projects.

Therefore, relevant documents issued and approved up to the date of the environmental assessment were consulted in the RIM as the minimum relevant information and operational experience to carry out the assessment. However, all safety analysis documentation is under the constraints of the nuclear safeguards regulations and as such are not available for public consultation. A publicly available summary is presented on the CNCAN website during the public consultations that are part of the licensing process carried out by CNCAN.

The document on the results of the nuclear safety analyses for the refurbishment of Unit U1 at CNE Cernavodă and for the extension of the DICA with MACSTOR-400 modules is not subject to the RIM.

Under the Nuclear Safety Directive No. 87/2014, nuclear safety analyses are carried out for obtaining the operating license, not for obtaining the environmental permit. In addition, there were no requirements identified at European and international level to require nuclear safety analyses specifically for the refurbishment activities.

However, chapter 8.2 of the IMR presents the risk assessment based on nuclear safety analyses and refers to events or accidents that may occur during the implementation of the U1 refurbishment project and the DICA extension and involving radioactive materials or contaminated components of the facilities, except for the reactor and its annexes. The possible accident scenarios assessed for Darlington in Canada are also applicable to CNE Cernavodă, since the refurbishment activities are similar.

The accident scenarios involving the fall of the transfer container for retube components with loss of its capacity to contain radioactive materials and on-site traffic accident involving the waste transfer container transporter (WTF) are analysed by AECL as well as in the basic licensing document developed for obtaining the necessary authorizations for the operation of DIDR-U5. These documents are the property of the permit holder.

As for the accident scenarios with the leakage of tritiated heavy water from the moderator circuit due to a pipe rupture and damage to the spent nuclear fuel in the storage pond, they are analysed for Unit 1 in operation and the results are presented in the Final Nuclear Safety Report, which is the basic authorization document for the operating permit issued by CNCAN. In the case of the planned refurbishment outage, the impact resulting from such an accident is substantially lower than in the case of Unit 1 power operation. Therefore, the results of the analyses and the response measures foreseen for the conditions of Unit 1 power operation are also covered for the conditions of the planned refurbishment outage.

The summary of the nuclear safety analyses, which has been made available to the public in the process of renewing the operating license for Unit 1, can be found at the web address <http://www.cnca.ro/transparenta-decisionala/sedinte-publice-anunturi-minutes/renewal-of-operating-licensing-u1-and-didsr-from-cne-Cernavodă>).

The nuclear safety analyses, in their entirety, are documents that are not available to the public for security and physical protection reasons.

Evaluation The question has been answered, but in a negative way: the results of the nuclear safety analyses have not been provided, firstly because they are not ready (which raises the question on which basis the operation license for U1 has been extended), and secondly because such results are not required to be provided for the EIA, according to the respondents. While this is true in the sense that none of the EU Directives specifically require to include the nuclear safety analyses results in the EIA for an NPP, the EIA Directive requires (in Art. 3 para.1) the environmental impact assessment to “identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project...”. This is not the case for the discussed EIA. The Romanian counterpart further mentions that there are no requirements at the EU and international level for nuclear safety analyses for refurbishment activities; while this is true in a strict sense, refurbishment operations are often considered as major changes in an NPP, or changes that may affect the safety of the plant, for which the international safety standards do require a review of the safety assessment. Moreover, there are national requirements for updating the safety analyses when applying for the extension of the operation licence (Article 34(3) of the Romanian Regulations on nuclear installations’ authorisation 336/2019). In addition, according to the IAEA Guidance No. NG-T-3.11 “Managing the Environmental Impact Assessment for Construction and Operation in New Nuclear Power Programs”, nuclear safety should be addressed in the EIAR in a dedicated section that should include “a review of the nuclear related aspects of the safety of the plant, it should describe the nuclear safety requirements and principles as well as their implementation in the design, construction and operation of a nuclear power plant.” While nuclear safety is mentioned in the EIAR, there is no dedicated section that comprehensively describes how the nuclear safety will be ensured during the LTO of U1 and the operation of the extended DICA.

Conclusion It is suggested to request an additional clarification from the Romanian counterpart on the basis of the extension of the validity of the U1 operation licence as long as the nuclear safety analyses of the U1 operation after refurbishment have not been yet been updated, as required by the Romanian regulations; it is also suggested to request the Romanian counterpart to present in a more comprehensive manner the radiological impact of the proposed project in the EIAR.

Q6) Please describe in more details how the cumulative radiological impact has been estimated for the refurbishment period and after that.

Answer In accordance with the provisions of Law no. 292/2018 on the environmental impact assessment of certain public and private projects, in force as of January 9, 2019, published in Monitorul Oficial of Romania, Part I no. 1043 of December 10, 2018 and the form in force applicable as of October 15, 2024, aligned with the mandatory provisions of Directive no. 52/2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (Text with EEA relevance), in force since May 15, 2014, published in the Official Journal of the European Union No. 124 of April 25, 2014, the requirements/methodology of the cumulative impact assessment implemented by the independent experts-certified environmental companies is in accordance with all factors and data assessments described in Article 5 of the said law.

Thus, with regard to your question on how the cumulative impact associated with the period during which the retrofitting works are planned has been estimated, please note that this subject is dealt with in subsection 5.2.12 of the RIM "Cumulation of effects with those of other existing and/or approved projects whose areas of influence overlap totally or partially with that of the project assessed, both during the construction and the operational period.

The cumulative radiological impact was estimated taking into account current activities and future projects as known at the time of the RIM study.

Evaluation The question has been answered, but only by repeating the information already provided in the EIAR. The provided explanation ("The cumulative radiological impact was estimated taking into account current activities and future projects as known at the time of the RIM study.") is not sufficient to understand how the conclusions in Table 116 were drawn. For instance, what does "minor" in Table 116 mean? Why is the cumulative effect of all units in operation estimated to be "insignificant"? A footnote under Table 108 specifies that an insignificant negative impact means, from a radiological point of view, that the impact does not produce visible effects, "the negative nature being given by the values detected by measurements against the background of the area, due to current activities on the Cernavodă NPP platform". Minor negative effects are not defined. Apart from this, it is not mentioned how the significance of the cumulated effects was estimated. As explained in the EC Guidance on the preparation of an Environmental Impact Assessment Report (Directive 2011/92/EU as amended by 2014/52/EU), "the coexistence of impacts may increase or decrease their combined impact. Impacts that are considered to be insignificant, when assessed individually, may become significant when combined with other impacts."

Conclusion It is suggested to request additional clarifications from the Romanian counterpart on the meaning of "minor negative impact" and the methodology used for combining the radiological effects and attributing them the significance stated in Table 116 on the EIAR.

Q7) Could you confirm that security events have been analysed, and if yes, that they have no significant impact (in terms of radiological consequences)?

Answer Yes, we confirm that physical protection events have been analysed and have no significant impact including radiological consequences. For security and proprietary/confidentiality rights reasons, the licensee's documentation cannot be made available to the public and is only reviewed and approved by the designated national authorities.

The licensee's physical protection (nuclear safety) plan covers all protection events identified in the project-based threat document issued by the Nuclear Regulator and the authorities responsible for national security (Romanian Intelligence Service, Ministry of National Defense, Ministry of Internal Affairs). CNCAN verifies and approves the Physical Protection Plan and conducts regulatory assessments and inspections, including the oversight of emergency exercises that include combined threats/nuclear safety-nuclear security-physical protection-radiological events to verify completeness and accuracy of implementation for the capabilities of the licensee's response force, as well as for internal and external (local and national) emergency response teams.

The emergency response plan implemented by CNE Cernavodă is based on a comprehensive analysis of internal and external nuclear safety, radiological, physical protection, chemical, cyber security, internal and external events and their impact on the critical infrastructure within the plant site, covering combined emergency situations and appropriate measures to mitigate the risks and reduce the consequences of the event to the lowest practicable level. In addition to regular exercises involving only the CNE Cernavodă Emergency Response Structure/Emergency Response Team, a General Emergency Exercise is planned and conducted annually, which also includes national authorities with responsibilities in Emergency and Crisis Management Plans.

Evaluation The question was positively answered. Since security events and their analysis are indeed confidential, asking for more details is not necessary.

Conclusion No need for further action.

Q8) Could you present the radiological consequences of the scenario involving the impact of an aircraft on DICA?

Answer The structure of a MACSTOR storage module is compact and robust with significant strength reserves with a high safety margin for the design basis loads. These features limit potential damage induced by an aircraft impact to the DICA. A no-fly zone, in which air traffic is prohibited, has been established by the Romanian authorities for the CNE Cernavodă site, reducing the probability of an aircraft crash to negligible levels. However, a conservative deterministic analysis (with assumptions chosen to generate a worst-case estimate of the consequences) for an event involving an aircraft crash on the intermediate storage of spent nuclear fuel was carried out for the purpose of emergency planning and preparedness. Different types of aircraft were assumed to crash accidentally on the intermediate spent nuclear fuel repository, regardless of the

very low probability of such events. Deterministic analyses were performed with highly conservative assumptions. The results of these analyses showed that, in the event of an aircraft crash, followed by a fire affecting the intermediate storage of spent nuclear fuel, the potential exposure of the population in the vicinity of the site would be below generic intervention levels for sheltering and evacuation. The safety analyses are not public documents. CNE Cernavodă's emergency plan and procedures include emergency measures and actions applicable to the DICA installation equipped with MACSTOR 200 modules and will be extended to apply to a larger site that will additionally contain MACSTOR 400 modules.

Evaluation Once again, the answer states that “safety analyses are not public documents”. We didn't ask to see the nuclear safety analyses, we asked for the results. The information provided in the EIAR and the answer to this question are not sufficient to understand whether the aircraft scenario (which is declared to have been analysed) considered the increased inventory of DICA or only the current inventory (of the SF stored in the existing MACSTOR200 modules). The fact that a no-fly zone over the Cernavodă site has been established is also irrelevant in case of a war.

Conclusion It is suggested to ask the Romanian counterpart for more details on this scenario (the results of the analyses, and a description of the scenario used for the analysis).

Q9) Have you considered the impact of a military aircraft (flying to/from the 57th Air Base "Captain Aviator Constantin Cantacuzino") too? If yes, could you present the results?

Answer Military airplanes were considered in the deterministic analysis mentioned above. The results of the conservative coverage analyses performed showed that, in the event of an aircraft crash followed by a fire affecting the intermediate spent nuclear fuel repository, the potential exposure of the population in the vicinity of the site would be below generic shelter and evacuation response levels. The probability of such an event is extremely low (< 1E-8 events/year).

The physical protection analyses are not public documents.

Evaluation The question has been answered, but once again by stating that “physical protection analyses are not public documents”; while we didn't ask to see the such analyses, the results of the analyses of such events, even with very low probabilities, should be presented in the EIAR. Paragraph 58 of the UNECE Guidance on the applicability of the Convention to the lifetime extension of nuclear power plants specifies that: “Generally, the extended lifetime of a nuclear power plant has impacts that are similar to those of a new nuclear power plant considered in its initial operation. These impacts include the following: [...] b) Impacts resulting from accidents, including accidents within the design basis and within the design extension conditions, as well as beyond design basis accidents³⁵.” Footnote 35 further mentions that “For the types of accidents to be considered based on the IAEA Safety Glossary: Terminology used in Nuclear Safety and Radiation Protection. 2018 Edition, see the list in annex I of this guidance.” The list

in Annex I includes beyond design basis accidents, design basis accidents, design extension conditions, and severe accidents, as defined in the 2018 IAEA Safety Glossary.

Conclusion It is suggested to ask the Romanian counterpart for more details about this scenario (the results of the analyses, and a description of the scenario used for the analysis), which is not a security event.

Q10) Please present in a transboundary context the results of the severe accidents that may affect the nuclear installations in operation at any one time on Cernavodă NPP site (i.e. during the refurbishment project and after that).

Answer Deterministic conservative nuclear safety analyses have been performed for severe accident scenarios at CNE Cernavodă. These analyses cover scenarios with very low estimated frequencies of occurrence, most of them in the range of 1E-6 to 1E-8 events per year and others with even lower frequencies. The purpose of these analyses was to support emergency planning and preparedness for the population in the vicinity of the site, taking into account lessons learned from the Fukushima Daiichi accident. In order to obtain calculated emissions large enough to justify protective actions, such as evacuation and relocation of the population in the immediate vicinity of the site, conservative assumptions (e.g. various failures of the reactor envelope containment system in addition to other system failures that would intervene to mitigate the consequences of a severe accident) were used to ensure that even highly unlikely events are thoroughly evaluated. The calculated doses under such conditions, which would require evacuation and relocation of the population in the vicinity of the site, would have negligible transboundary impact due to dilution and long-range dispersion.

Based on exceptional international situations including data from the Chernobyl and Fukushima accidents, doses of ionizing radiation at distances greater than 300 km from the site of a severe nuclear accident are very low, in the order of microSieverts (μSv). The values are well below the legal limit of 1 mSv/year for members of the public, are lower than the typical annual natural background radiation of about 2.4 mSv/year, and are well below levels that would pose a health risk or require protective action.

Based on conservative analyses, as well as lessons learned from international experience, we do not anticipate any significant cross-border radiological impact.

Therefore, while CNE Cernavodă maintains robust nuclear safety and emergency response measures to protect the local and regional population in the event of emergencies, the potential for radiological consequences affecting other countries is extremely low.

The above considerations remain valid for the duration of the refurbishment project, when the nuclear fuel is removed from the reactor's active reactor area and the risk of severe accidents associated with operation at rated power will

be eliminated. In addition, given the design improvements that will be implemented during the refurbishment, the potential for radiological consequences affecting other countries will be even lower after restart.

Evaluation An answer is provided, but only at a level of estimations, without providing the actual results (of the severe accidents analyses). The answer states that “The purpose of these analyses was to support emergency planning and preparedness for the population in the vicinity of the site, taking into account lessons learned from the Fukushima Daiichi accident”; according to the Nuclear Safety Directive (Art. 6(e)), the license holders shall “provide for appropriate on-site emergency procedures and arrangements, including severe accident management guidelines or equivalent arrangements, for responding effectively to accidents in order to prevent or mitigate their consequences. Those shall in particular: (ii) address accidents and severe accidents that could occur in all operational modes and those that simultaneously involve or affect several units”. It would be interesting to know whether the Emergency Response Plan of Cernavodă NPP covers severe accidents and simultaneous accidents, and, in particular, if such simultaneous accidents have been analysed and what the results were.

Conclusion It is suggested to ask the Romanian counterpart (1) to specify if the On-Site Emergency Response Plan covers simultaneous accidents (2) if such accidents have been analysed, and if so, what the results were, and (3) to include the results of the DEC, including severe accidents, in the EIAR.

Q11) Please present in a transboundary context the cumulative radiological impact of the nuclear installations in operation at any one time on Cernavodă NPP site (i.e. during the refurbishment project and after that).

Answer The answer is given in RIM - Tab. 116 Qualitative assessment of the RADIOLOGICAL impact on the environmental factors, by cumulation with other projects and operational activities on the CERNAVODA NPP site, also presented in the answer to question no. 6 of this list.

ALL NUCLEAR OBJECTIVES OPERATING on the NPP Site
 Simultaneous operation U1 cycle 2 + U2 + U3+ U4 +
 DICA in operation +
 CTRF running +
 DICA MACSTOR 400 module built +
 CTRF in operation

Under the conditions of successful implementation of the U1 refurbishment project, the radioactive emissions of the unit on resumption of operation will be at most at the level before the refurbishment. As a result of the commissioning of the CTRF, the tritium removal treatment of tritiated heavy water tritiated in the moderator system circuits of the two units (U1 and U2) will gradually decrease tritium emissions from these two units.

With the commissioning of units 3 and 4, the level of radioactive effluent emissions from the CNE Cernavodă site will increase corresponding to the period of

the operating cycle of these units, but, as will be justified on the basis of the level of tritium concentration in the reactors' active systems, the application of the tritium removal process (detritus) will lead to a limitation of the upward trend of emissions. Thus, the simultaneous operation of the four units, with the CTRF installed and functioning properly, is expected to reduce tritium emissions from the site to a lower level than at present. The cumulative radiological impact on environmental factors is insignificant, local/regional, reversible, with long-term effects.

Evaluation The explanation provided does not add to what is already provided in the EIAR, where the transboundary impact (if any) of the cumulated effects is not discussed. See also the evaluation of the answer to Q10.

Conclusion Same suggestion as for Q10).

2 CONCLUSIONS AND RECOMMENDATIONS

Having examined the Romanian answers to the questions, it is concluded that they are not satisfactory and that further actions are needed in order to obtain the necessary clarifications.

The following actions are recommended:

1. Ask the Romanian counterpart the following additional questions:
 - I. Q1-1) Based on your answer, we would like to know what will happen if the dedicated RW storage (DIDR-U5) is not be ready on time?
 - II. Q4-1) Our question was related to the external consultation process (not with the national public). Could you therefore answer the question what would happen if, during the Espoo consultations, a negative opinion from the public of the countries potentially affected is received?
 - III. Q5-1) We did not ask to see the Safety Assessment Report of the Cernavodă NPP, but the results of the nuclear safety analyses updated for the long-time operation of U1; based on your answer, we understand that these analyses are not ready yet. On what basis was the validity period of the operation license of the Cernavodă NPP U1 extended until 2061?
 - IV. Q6-1) Could you please provide more details (beyond those already provided in the EIAR) on the assessment of the cumulative radiological impact? More precisely,
 - a. please define the meaning of “minor negative impact” as used in Table 108;
 - b. please indicate the methodology used for estimating the significance of cumulated radiological impacts (as stated in Table 116).
 - V. Q8-1) We did not ask to see the Safety Assessment Report of DICA, but the results of the safety analyses will give us the radiological consequences of the potential accidents; could you please provide the results and a description of the scenario used for analyzing the aircraft crash on the DICA event?
 - VI. Q9-1) A military aircraft crash on DICA is not necessarily a security event; a malfunction could happen and the crash could be unintentional. The fact that a no-fly zone over the Cernavodă site has been established is irrelevant in case of a war, and unfortunately, there is currently a war close to Romanian borders. Could you please provide the results and a description of the scenario used for analyzing the military aircraft crash on the DICA event?
 - VII. Q11-1) According to your answer, severe accidents’ analyses have been performed in order to “support emergency planning and preparedness for the population in the vicinity of the site, taking into account lessons

learned from the Fukushima Daiichi accident”. The Nuclear Safety Directive requires the licence holders to provide for appropriate on-site emergency procedures and arrangements to deal with “accidents and severe accidents that could occur in all operational modes and those that simultaneously involve or affect several units”. Could you please specify if such simultaneous accidents have been analysed, and if so, what the results were?

2. Ask the Romanian counterpart to revise the EIAR by including a section dedicated to the radiological impact assessment, where the radiological consequences of DEC including severe accidents should be presented in sufficient detail to allow a meaningful estimation of the potential transboundary impacts (i.e. with a description of the scenarios used, the source terms considered, and the analysis results in terms of doses to the population up to 1000 km from Cernavodă).

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Umweltbundesamt GmbH

Spittelauer Laende 5
1090 Vienna/Austria

Tel.: +43-1-313 04

office@umweltbundesamt.at
www.umweltbundesamt.at