

Environmental Impact Assessment Report

for the Facility for Treatment and Conditioning of Radioactive Waste with a High Volume Reduction Factor at Kozloduy Nuclear Power Plant

CHAPTER 7

**STATEMENTS AND OPINIONS EXPRESSED
BY THE CONCERNED PUBLIC, AS WELL AS
THE AUTHORITIES INVOLVED IN DECISION
MAKING FOR EIA AND OTHER SPECIALIZED
AUTHORITIES, AS A RESULT OF THE
CONSULTATIONS MADE**

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7. STATEMENTS AND OPINIONS EXPRESSED BY THE CONCERNED PUBLIC, AS WELL AS THE AUTHORITIES INVOLVED IN DECISION MAKING FOR SCOPE AND CONTENTS OF EIA-R AND OTHER SPECIALIZED AUTHORITIES, AS A RESULT OF THE CONSULTATIONS MADE

7.1 List of the natural and legal persons, to whom a letter for consultations on the Terms of Reference for the scope and content of the EIA Report has been sent

In accordance with the requirements of art. 95, par. 3 of the Environmental Protection Act and art. 9 of the Ordinance on the terms and procedures for implementation of Environmental Impact Assessment, the Contracting authority (KNPP) has conducted consultations on the IP with the competent authority (MEW) and with the interested and specialized departments, and has sent the necessary information as follows:

1. Notification for evaluation of the need of an EIA for Plasma Melting Facility for radioactive waste treatment and conditioning at Kozloduy NPP, 04.2009 (KPMU/IEA/001_0).
2. Letter ref. No. 717/13.06.2005, Notification for the IP of the Mayor of Kozloduy Municipality and through him to the concerned public by information provided in the Information centre of the Municipality
3. Letter ref. No. 6254/04.10.2011 to Ministry of Environment and Water for approval of the Terms of Reference for the scope and content of the EIA-R for the Facility for Treatment and Conditioning of Solid Radioactive Wastes with High Volume Reduction Factor at Kozloduy Nuclear Power Plant.
4. Letter to Ministry of Health for approval of the Terms of Reference for the scope and content of the EIA-R for the Facility for Treatment and Conditioning of Solid Radioactive Wastes with High Volume Reduction Factor at Kozloduy Nuclear Power Plant.
5. Letter ref. No. 561/12.04.2012 the Mayor of Kozloduy for information and statement regarding rev.5 of the EIAR Terms of Reference.
6. Letter ref. No. 562/12.04.2012 to the Chairman of Municipality Council of Kozloduy for information and statement regarding rev.5 of the EIAR Terms of Reference.
7. Letter Ref. N D „S & Q”-393/13.03.2013 to the Chairman of WIN- Bulgaria for information and statement regarding rev.7 of the EIAR Terms of Reference.
8. Letter Ref. N D „S & Q”-394/13.03.2013 to the Chairman of the Bulgarian Nuclear Society (BNS) for information and statement regarding rev.7 of the EIAR Terms of Reference.

9. Letter Ref. N D „S & Q”-395/13.03.2013 to the Chairman of the Bulgarian Nuclear Regulation Agency (BNRA) for information and statement regarding rev.7 of the EIAR Terms of Reference.

7.2 List of the natural and legal persons, who have given their statement on the Investment Proposal

Until the present moment statements, recommendations or prescription of necessary actions for the preparation of EIA and the realization of the investment proposal have been received from the following interested specialized departments:

1. Decision No. 26-IIP/22.07.2010 of the Minister of Environment and Water on evaluation of the need to perform an environmental impact assessment of the Facility for Treatment and Conditioning of Solid Radioactive Wastes with High Volume Reduction Factor at Kozloduy Nuclear Power Plant, Ref. N 26-00-939/20.07.2010.
2. Letter of the Ministry of Health No. 26-00-1238/28.10.2011 regarding the submitted Terms of Reference for the scope and content of the environmental impact assessment of the Facility for Treatment and Conditioning of Solid Radioactive Wastes with High Volume Reduction Factor at Kozloduy Nuclear Power Plant.
3. Letter of the Ministry of Environment and Water No. 26-00-3177/19.10.2011 regarding the submitted Terms of Reference for the scope and content of the Environmental Impact Assessment (EIA) of the Investment proposal of the Facility for Treatment and Conditioning of Solid Radioactive Wastes with High Volume Reduction Factor at Kozloduy Nuclear Power Plant.
4. Letter of the Ministry of Environment and Water No. 26-00-3177/12.03.2012 regarding the submitted Terms of Reference for the scope and content of the Environmental Impact Assessment (EIA) of the Investment proposal of the Facility for Treatment and Conditioning of Radioactive Wastes (RAW) with High Volume Reduction Factor (HVRF) at Kozloduy Nuclear Power Plant.
5. Letter of the Ministry of Environment and Water No. 26-00-2007/31.07.2012 regarding the procedure of the Environmental Impact Assessment (EIA) of the Investment proposal of the Facility for Treatment and Conditioning of Radioactive Wastes (RAW) with High Volume Reduction Factor (HVRF) at Kozloduy Nuclear Power Plant.
6. Letter of the Ministry of Environment and Water No. OVOS-277/13.12.2012 on EIAR – quality assessment.
7. Letter of the Kozloduy municipality No 73-00-126/20.12.2012 regarding notification about investment proposal for the construction of a “Facility for Treatment and Conditioning of Solid Radioactive Wastes with High Volume Reduction Factor at Kozloduy Nuclear Power Plant”.
8. Letter of the Kozloduy municipality No 73-00-31/31.01.2013 regarding the Terms of Reference for the scope and content of the Environmental Impact Assessment (EIA) of the Investment Proposal for the construction of a

“Facility for Treatment and Conditioning of Solid Radioactive Wastes with High Volume Reduction Factor at Kozloduy Nuclear Power Plant”.

9. Letter of the WIN –Women in the Nuclear Industry-Bulgaria, No 005/15.03.2013.
10. Letter of the Nuclear Regulatory Agency No 47-00-41/21.03.2013.
11. Letter of Bulgarian Nuclear Society No F-1879-1.04.2013 for submitting statement on the Terms of Reference for the Scope and Content of the Environmental Impact Assessment (EIA).
12. Letter of the MEW No OVOS-277/28.05.2013 regarding the quality assessment of a supplemented EIA report and of a revised Degree of Impact Assessment Report (DIAR) for investment proposal "Facility for Treatment and Conditioning of Radioactive Waste (RAW) with high volume reduction factor (HVRF) at Kozloduy NPP”.

Copies of the letters sent for consultation and the received statements, opinions and references on the ToR for defining the scope and content of the EIA Report are presented in Chapter 11, Section 11.1 of the present EIA-R, respectively in Attachment 5 – Copies of the letters for consultation sent by the Contracting Authority to the interested parties, in Attachment 6 – Copies of the letters with expressed statements, opinions and recommendations, and in Attachment 7 – Copies of the written documents of the information on the EIA procedure exchanged with the Romanian competent authorities (transboundary procedure).

Summary of the performed consultations on the ToR for the scope and content of the EIA Report is presented in section 7.2.1, and tables 7.2.1-1 and 7.2.1-2 present the answers by the experts to the MEW letter, as a Competent Authority for EIAR quality assessment.

7.2.1 Summary of the carried-out consultations on the ToR for the scope and content of the EIA Report with reasons for acceptance or non-acceptance of the referenced comments, statements, opinions and recommendations

№	Carried-out consultations (Municipality, CA, Organizations, Stakeholders)	Expressed statements/recommendations/comments, etc.	Accepted/ Not accepted	Reasons
1.	MEW	<p>Decision No 26-IIP/2010 of the Minister of MEW on evaluation of the need to perform an EIA of the “Facility for treatment and conditioning of solid radioactive waste with a high volume reduction factor at Kozloduy NPP”, Ref. No. 26-00-939/20.07.2010</p> <p>1. DECISION that an environmental impact assessment must be performed for the investment proposal, that is likely to exercise a significant adverse effect on natural habitats, populations and habitats of species that are subject of conservation in protected areas</p> <p>The investment proposal is subject to assessment of its compatibility with the preservation object and purposes in the protected zones, pursuant to article 31, paragraph 4 in connection with paragraph 1 of the Biological Diversity Act, and article 2, paragraph 1, item 3, sub-item ‘a’ in connection with paragraph 3 of the RCPEC.</p>	Recommendations are addressed in the elaboration of the ToR for the Scope and Content of the EIA-R for the IP.	Observation of the legislation on the environmental and human health protection

2	MEW	<p>Letter of the Ministry of Health No. 26-00-1238/28.10.2011 concerning Terms of Reference for the scope and content of the environmental impact assessment of the Facility for Treatment and Conditioning of Solid Radioactive Wastes with High Volume Reduction Factor at Kozloduy Nuclear Power Plant.</p> <p>I. The structure of the Terms of Reference complies with the regulations to some extent, but regarding its contents there are substantial omissions, therefore it must be revised.</p> <p>II. Regarding the requirements of the EIA Convention in transboundary context, it is necessary that information in the form accepted with Decision I/4 at the first meeting of the countries under the EIA Convention in transboundary context is prepared and submitted to MEW. The information will be sent to Romania, being the closest country to the IP location. The information should be supplemented by the revised ToR on the EIA scope (in English).</p> <p>In case that Romania declares its consent to participate in the EIA procedure, besides the results from all consultations performed in Bulgaria, the Romanian statement should also be considered in the preparation of the Final version of the ToR and the EIA report.</p>	Recommendations are addressed in the elaboration of the revised ToR for the Scope and Content of the EIA-R for the IP and the Notification of Romania	Observation of the legislation on the environmental and human health protection
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3.	MH	<p>Letter of the Ministry of Health No. 26-00-1238/28.10.2011 regarding the submitted Terms of Reference for the scope and content of the environmental impact assessment of the Facility for Treatment and Conditioning of Solid Radioactive Wastes with High Volume Reduction Factor at Kozloduy Nuclear Power Plant</p> <p>The Ministry of Health considers that the content and the scope of the assessment of the health and hygiene environmental aspects and the risk to human health (Attachment 4 to the ToR) should include determination of the type and the quantity of the expected waste and emissions (waters, air and soils pollutions; noise; vibrations; emissions - light, heat; radiation, etc.) as a result of the operation of the facility, in compliance with art. 10 para 3 p.1 c.</p> <p>For the purposes of the assessment of the risk to human health, to the characteristics and the required areas should be included also temporary storage sites on the site for radioactive waste. The assessment of the possibility for the occurrence of potential impacts as regards radiation, it is necessary to comprise all the main processes and activities, including transportation of RAW.</p>	<p>Recommendations are addressed in the elaboration of the revised ToR for the Scope and Content of the EIA-R for the IP.</p>	<p>Observation of the legislation on the environmental and human health protection.</p>
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4.	MEW	<p>Letter of the Ministry of Environment and Water No.26-00-3177/12.03.2012 concerning Terms of Reference for the scope and content of the Environmental Impact Assessment (EIA) of the Investment proposal of the Facility for Treatment and Conditioning of Radioactive Wastes (RAW) with High Volume Reduction Factor (HVRF) at Kozloduy Nuclear Power Plant.</p> <ol style="list-style-type: none"> Regarding the submitted revised ToR for EIA, it has been determined that the Revised ToR complies with the recommendations from MEW Letter No No26-00-3177/19.10.2011, and the revised version includes the substantial omissions determined regarding its content in the previous version. The revised ToR for EIA has been sent to the Director of the Basin direction for water management “Danube Region” based in Pleven for competency statement pursuant to art. 4a, par. 2 from the EIA Regulation. In this regard, according to the answer received by the MEW, IP is admissible in terms of complying with the environmental objectives and the measures for achieving better state of the waters and the areas for their protection, determined in the Plan for management of the river basins in the Danube region. It is noted that there is a discrepancy in the wording of the IP under Decision 26-IIP/2010 (Ref. No 26-00-939/20.07.2010r) and the EIA ToR submitted for approval. Given that it is necessary to specify the differences in the name of the IP. Regarding the submitted form for notification of the concerned party, according to the EIA ToR and the received answer by Romania, together with the sent questions and proposals, they should be considered in the EIAR preparation. <p>In regard to the above, final version of the ToR for EIA scope is expected (1 copy in Bulgarian and 1 copy in English), which should include the notes of the Romanian Ministry of Environment and Water, as well as all opinions and statements regarding the IP expressed to the moment.</p>	Recommendations are addressed in the elaboration of the revised ToR for the Scope and Content of the EIA-R for the IP.	bservation of the legislation on the environmental and human health protection
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5.	MEW	<p>MEW letter No 26-00-2007/31.07.2012 regarding the procedure of the Environmental Impact Assessment (EIA) of the Investment proposal of the Facility for Treatment and Conditioning of Radioactive Wastes (RAW) with High Volume Reduction Factor (HVRF) at Kozloduy Nuclear Power Plant.</p> <p>Notifies that:</p> <ol style="list-style-type: none"> 1. The supplemented ToR for EIA scope complies with the identified questions by the Romanian Ministry of Environment and Forests. 2. The submitted ToR for the EIA scope in English has been sent to Romania as a concerned party, according to the EIA Convention in transboundary context, and Romania has declared its willingness to participate in the EIA procedure. After receiving the Romanian statement on the submitted ToR, the Investor will be notified in order to consider it in the EIAR development. 3. The developed EIAR together with the DIAR should be submitted to MEW for quality assessment, and the due fee should be paid by bank transfer. 	<p>MEW approves the supplemented EIA ToR and proposes to assign the development of the Report.</p> <p>Copy of the payment order for the due fee will be attached to the documentation for submitting of EIAR to MEW for quality assessment.</p>	<p>Observation of the legislation on the environmental and human health protection.</p>
6.	Kozloduy Municipality Ref. No 7300126 /20.12.2012	<p>Notification of the IP for construction of a “Facility for treatment and conditioning of radioactive waste with a high volume reduction factor at Kozloduy NPP”</p>	<p>Within the prescribed time opinions, statements and / or objections from the affected population have not been received.</p>	<p>Complies with the normative requirements.</p>

7.	Kozloduy Municipality, Ref. No 730031(1)/ 31.01.2013	Kozloduy Municipality accepts and approves the ToR for the EIA scope and content for the IP for the construction of a “Facility for Treatment and Conditioning of Radioactive Wastes with High Volume Reduction Factor at Kozloduy Nuclear Power Plant”.	Accepted, corresponds to the views of the authors of EIAR ToR.	Corresponds to the normative requirements.
8.	WIN Bulgaria Ref. No 005/15.03.2013	There are no comments and remarks on the submitted documentation by the ToR for EIA scope and content.	Accepted, corresponds to the views of the authors of EIAR ToR.	Corresponds to the normative requirements.
9.	BNRA Ref. No 47-00 41/21.03.2013	There are no comments and remarks on the submitted documentation by the ToR for EIA scope and content.	Accepted, corresponds to the views of the authors of EIAR ToR.	Corresponds to the normative requirements.
10.	Bulgarian Nuclear Society, Ref. No Ф-1879/01.04.13	<ul style="list-style-type: none"> The ToR is developed according to the current normative base. The IP will definitely reduce the volume and weight of the waste, which will be stored in the National Repository for RAW, and of those that are temporarily stored at different sites on the KNPP territory. The IP implementation will allow the country to fulfill the engagements taken under the Joint Convention on the Safety of Radioactive Waste Management, the costs for final RAW disposal will be reduced and the implementation of continuous dismantling during the decommissioning of KNPP Units 1-4 will be ensured. BNS supports the IP, because the construction of such a facility is essential and guarantees the safe RAW management. We hope for actual implementation within the stated time frame. Recommendation – during the public discussion more detailed information should be given about the international operation of such facilities, with a focus on the good practice in the area. Based on the reasons stated in the letter, once again we support the IP implementation. 	Accepted, corresponds to the views of the authors of ToR and the experts who have developed EIAR. The recommendation is accepted, and during the public discussion clarification of the implemented similar facilities will be made.	Corresponds to the normative requirements

Table 7.2.1-1 Reference to the MEW letter on the EIAR quality assessment with reasons for the accepted and non-accepted remarks, statements, opinions and recommendations

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
After reviewing of the presented information, according to art. 14, par. 4 of the <i>Regulation on the terms and procedure of EIA implementation</i> (The EIA Regulation, adopted with CMD 59/2003, last amended SG 94/2012) the quality assessment of the above mentioned EIAR is negative , as the presented information is incomplete and insufficient for taking a decision, including the received written reasoned negative statement by the Ministry of Health. In regard to the omissions identified during the review of the documentation and based on art. 15, par. 2 from the mentioned Regulation, we return the Report for revision and supplementing, considering the following:	Accepted, the current EIAR is completely revised, the omissions have been removed and additional information is presented supporting the conclusions of the EIA experts.	Corresponds to the normative requirements regarding preservation of the environment and minimization of the health risk.
The Water component The description and the analysis of the components of the environment in which the investment proposal is going to be implemented should be prepared in the EIA Report in accordance with the information for the water bodies in the Plan for management of river basins (PMRB) in the Danube region, as follows: <ul style="list-style-type: none"> The investment proposal, according to the information presented, falls in a surface water body from the Danube valley, which is highly modified, with the name of Danube RWB01 and code BG1DU000R001. The ecological potential of the water body is moderate. The chemical condition of the water body is bad. The specific ecologic goal for a surface water body is the “Avoidance of deterioration of the ecological potential and achieving a good one until 2021. Avoidance of the deterioration of the chemical condition and achieving a good one until 2027”. 	The additional information is accepted, in accordance with the information on the water bodies in PMRB in the Danube region it is included in item 3.2.2. of EIAR.	Compliance with the normative requirements for preservation of waters as component of the environment.
<ul style="list-style-type: none"> The investment proposal falls in the region of distribution of the underground water body Pore Waters in the Quaternary - Kozloduy lowlands, with the following features: code BG1G0000QAL005 and area of 39,336 km². The chemical condition 	Accepted, presented in detail in chapter 3, section 3.	Compliance with the normative requirements for

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
<p>of the underground water body is assessed as good state, whereas the quantitative condition is assessed as bad state. The specific ecologic goal of the underground water body is the “Preservation of the good chemical condition of the water body and achieving good quantitative condition”.</p>		<p>preservation of waters as component of the environment.</p>
<ul style="list-style-type: none"> The underground water body is defined as potable water protection area in line with article 119a, para 1, i.1 of the Waters Act (WA), with code BG1DGW0000Qal005, whereas the state of the area is bad. The specific ecologic goal for the potable waters protection areas is: “Reducing the necessity of water purification before the utilization of water and providing the designed amount in the water abstraction facilities until 2015. <p>The main goal of the PMRB is achieving, maintaining and improving the good state of the waters in the Danube Region for Basin Management until 2015. The measures envisaged in the EIA Report for avoiding and reducing the significant adverse effects over the environment (waters) during the design, implementation and operation of the investment proposal should necessarily consider the goals for protection of water bodies and the areas for their protection, in the scope of which the proposal is located.</p>	<p>Accepted, presented in detail in chapter 3, section 3.</p>	<p>Compliance with the normative requirements for preservation of waters as component of the environment.</p>
<p>In order to achieve the ecologic goals set out in the PMRB the following programs of measures have been established: for avoiding and reducing the anthropogenic stress (point and diffuse pollution sources) and the impact on the water resources; measures on monitoring and control, including measures for the water protection areas. In the PMRB of the Danube River Basin the following measures are defined which concern the implementation of the investment proposal:</p>	<p>Accepted, the IP does not fall within in a water protection area, according to art. 119a, par.1, it.5 from the Water Act.</p>	<p>Compliance with the normative requirements for preservation of waters as component of the environment.</p>

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
<ul style="list-style-type: none"> Program 7.1.3. Measures for protection of the water for potable and household water supply, including the measures for preservation of its quality in view of reducing the degree of purification for provision of water of potable quality: BG1MB022 - Control on the implementation of the conditions from the decisions on the EIA, the permits on the Waters Act and EPA, the instructions for determination of Sanitary and Security Area (SSA) and other regulatory documents; BG1MB011 - Prohibition on the direct outlet of water which contains hazardous and adverse substances in the areas for protection of underground waters; BG1MB018 - Pursuance of the regulation for environmental impact assessment in accordance with the EPA of the investment proposals for extraction of ores and minerals, overground and underground construction and other activities and technologies for which there is a probability to worsen the quantity and/or the quality of the potable waters. 	<p>The measures included in the PMRB in the Danube region for achieving and preserving the good state until 2015 do not foresee prohibitions for the IP implementation and operation. Presented in detail in chapter 4, it. 4.1.2.4, and the measures are indicated in chapter 6.</p>	<p>Compliance with the normative requirements for preservation of waters as component of the environment.</p>
<ul style="list-style-type: none"> Program 7.1.4. Measures to regulate the abstraction of fresh ground waters and underground waters. Regulating the artificial feeding of the underground waters: BG1MB039 - Control over the observance of the conditions in the water abstraction permit; BG1MS014 - Optimization of the water abstraction for industrial needs and by introducing turnover cycles. 	<p>Accepted, presented in detail in chapter 4, it. 4.1.2.4, and the measures are indicated in chapter 6.</p>	<p>Compliance with the normative requirements for preservation of waters as component of the environment.</p>

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
<ul style="list-style-type: none"> Program 7.1.5.1. Measures to regulate the emissions by defining prohibitions for introducing contaminants from contamination point sources or requirements for issuing of permits and their periodic review and update for the underground waters: BG1MS016 - Prohibition on the disposal of priority substances as well as other activities on the surface and in the underground water unit which may lead to indirect inlet of priority substances in the underground waters; BG1MS017 - Prohibition on the use of materials which contain priority substances in the building of constructions, engineering and construction facilities and others in which there is or it is possible to have a contact with the underground waters and due to which the underground waters could be contaminated. 	Accepted, presented in detail in chapter 4, it. 4.1.2.4, and the measures are indicated in chapter 6 - items 6.3 and 6.4.	Compliance with the normative requirements for preservation of waters as component of the environment.
<ul style="list-style-type: none"> Program 7.1.5.2. Measures to regulate the emissions by defining prohibitions for introducing contaminants from contamination point sources or requirements for issuing of permits and their periodic review and update for the underground waters: BG1MB076 - Control over the implementation of the conditions of the permit for the discharge of waste waters in water units. 	Accepted, presented in detail in chapter 4, it. 4.1.2.4, and the measures are indicated in chapter 6.	Compliance with the normative requirements for preservation of waters as component of the environment.
<ul style="list-style-type: none"> Program 7.1.6. Measures to define prohibitions for introducing contaminants from diffuse contamination sources and measures to prevent or mitigate the contamination: BG1MB098 - Prohibitions on abandoning, unregulated disposal or burning or other form of uncontrolled disposal of waste; BG1MB082 - Control over the implementation of the EIA permit conditions; BG1MB108 - Control on the industrial areas for industrial and hazardous waste; BG1MB109 - Control on the impact of the pollution of air on the waters condition; BG1MB085 - Surface and underground water monitoring for assessment of the condition of the water bodies. 	Accepted, presented in detail in chapter 4, it. 4.1.2.4, and the measures are indicated in chapter 6.	Compliance with the normative requirements for preservation of waters as component of the environment.

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
<ul style="list-style-type: none"> Program 7.1.7. Measures to prevent pollution of the waters with priority substances: BG1MB055 - Monitoring of waste waters which contain adverse of hazardous substances; BG1MB056 - Monitoring of the waters and the water units which have been affected by the discharge points for waste waters which contain adverse and hazardous substances. 	Accepted, presented in detail in chapter 4, it. 4.1.2.4, and the measures are indicated in chapter 6.	Compliance with the normative requirements for preservation of waters as environmental component.
<ul style="list-style-type: none"> Program 7.1.8. Measures to prevent or reduce the impact of emergency pollution: BG1MB114 - During emergencies which create premises for pollution of the water unit, the permit holder is obliged to take the necessary measures for mitigation and/or liquidation of the consequences from the pollution and to immediately inform the respective bodies; BG1MB117 - Preparation of a safety report, emergency plan of the enterprise and/or facility by operators of enterprises and/or facilities with high risk potential; BG1MB118 - Regulation for actions by the operator of the enterprise and/or the facilities in case of occurrence of a major accident; BG1MB120 - Preventive activity for non-admitting and reducing the adverse consequence in case of occurrence of accidents. 	Accepted, included in chapter 3 and chapter 4 of EIAR. PMF does not use or generate waste waters, which could lead to requesting of change in the issued permits for water intake and discharge.	Complies with the normative requirements for preservation of waters as component of the environment.
During the implementation of the investment proposal it is necessary to observe art. 46, para 2 of the WA and the measures for protection of the underground waters from pollution whereas the prohibitions of art. 118a, para 1, items 2÷5 of the WA should be taken into account. If necessary, the issued permits according to the WA for the water abstraction and utilization of Kozloduy NPP Plc. water unit need to be modified, if during the implementation and operation of the investment proposal the parameters of the already issued permits for water abstraction and waste water discharge points cannot be met.	Accepted, included in chapter 3 and chapter 4 of EIAR. PMF does not use or generate waste waters, which could lead to requesting of change in the issued permits for water intake and discharge.	Compliance with the normative requirements for preservation of waters as component of the environment.

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
With regard to the emission norms in the waste waters, fact records for 2009 and 2010 have been ascertained, clearly presented in tables, but it is not clear what is envisaged to avoid deviations from the norms.	Accepted, the facts have been discussed and measures for avoidance of deviations have been indicated in EIAR chapter 4 and chapter 6.	Compliance with the normative requirements for preservation of waters as component of the environment.
In report 1, chapter 3 there are some technical inaccuracies in i.3.2.3 Hydrogeology, which need to be corrected.	Accepted, included in chapter 3, section 3.2.3.	Correction of technical inaccuracies.
The underground water body BG1G0000QPL023 Pore Waters in the Quaternary between the Rivers of Lom and Iskar needs to be added on pp. 31 - 33, since the most South eastern part of the site of the NPP falls within this underground water body where the cover in particular is of sandy loess and typical loess.	Accepted, the indicated water body has been added.	Compliance with the normative requirements for preservation of waters as component of the environment.
The available data for 2009-2011 should be used on page 38.	The remark has been included.	Compliance with the normative requirements for preservation of waters as component of the environment.

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
Table 3.2.3.4-1 Average annual admissible concentrations of separate radionuclide in the groundwater radionuclide indicators have been listed, whereas after this for the underground waters data have been indicated only for beta activity and tritium, whereas for the remaining indicated only data have been quoted from a mathematical model for migration in underground waters within the boundaries of the non-flooding terrace. At the same time investigation has been made for rainfall and waste waters - as indicated on p.38. "During the gamma-spectrometry analyses of the waste and rainfall waters at the Depot for Non-nuclear Household and Industrial Waste (DNHIW ¹) no technogenic activity has been recorded. All results for ⁵⁴ Mn, ⁶⁰ Co, ¹³⁴ Cs and ¹³⁷ Cs are lower than the respective MDA (0.096÷0.95Bq/l)." Clarify what indicators are investigated in the underground waters during the house monitoring and add additional data available.	Accepted, information on the investigated parameters has been added in chapter 3, and available data from the in-house monitoring has also been added.	Compliance with the normative requirements for preservation of waters as component of the environment.
Correct the technical error on p. 37 "The highest total activity is 2.43Bq/l, measured at the territory of the RAWSF" - clarify whether this is alpha or beta activity.	Accepted and corrected	Correction of technical mistake.
Clarify whether the available boreholes from the house monitoring at the site of the NPP are sufficient to reflect the effect of the plasma melting facility on the underground waters and this assessment should be added to the report. If ascertained that the available boreholes do not provide a sufficiently representative assessment for the effect of the facility on the underground water, it is necessary to envisage to construction of a new monitoring bore hole.	Accepted for clarification, which together with the assessment has been made in EIAR chapter 4. The PMF IP does not discharge production waste waters requiring a new monitoring bore hole.	Compliance with the normative requirements for preservation of waters as component of the environment.

¹ RCMIW in the original English translation of the EIA Report.

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
On the Biological Diversity component		
Provide current information for all protected territories falling within the 30-km area around the Kozloduy NPP whereas implementation impact assessment should be made for the investment proposal over them.	Accepted, current information is presented in it. 3.10.1.	Compliance with the normative requirements for preservation of biological diversity.
Correct the term error made in the text of Chapter 4, i. 4.1.1.11.	Accepted, included in chapter 4, section 4.1.1.11.	Correction of technical mistake.
Radiation aspect of the impact Due to the specificity of the investment proposal, in the EIA Report the radiation impact should play a dominant role for the assessment of risk for the environment and the population in the vicinity of the Kozloduy NPP. In this relation, in the report submitted on the one hand there are the non-radiation aspects which are larger in volume and content, whereas at the same time the statements related to the radiation aspect of impact of the investment proposal are scanty and declarative, repeating totally and solely the provisions of the Regulation on Safety during Radioactive Waste Management (prom. SG, issue 72/17.08.2004). Taking into account that the submitted EIA Report concerns a facility which would be located at the site of nuclear power plant which has been in operation for years, it is first and foremost important to prove the presence or, respectively, the absence of a cumulative effect of the commissioning of another nuclear facility at the territory of the plant site. According to the EIA Report the potential radiation impact is localized within the plant site and it is negligibly low off the site. This statement needs to be proven and justified. For this purpose it is necessary: To present radionuclide emissions model for point sources at the Kozloduy NPP site.	Accepted, Attachment 10 includes the performed “Analysis of the dose rate for the population in the KNPP 30-km monitored area from the gaseous and liquid releases in the environment from the decommissioning process of Units 1-4 and the emissions from the operation of the Plasma melting facility (PMF, Project 5c)”. The results from the modeling are used for proof and justification of the assessments and forecasts made in EIAR chapter 4, as well as in CAR (Attachment 17 to the EIA-R).	Compliance with the normative requirements for preservation of the environmental components and human health.

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
If there is presence of a cumulative effect of impact due to the operation of the facility it is necessary to re-calculate the dimensions of the already established Kozloduy NPP areas with specialized status.	Accepted. Based on the performed modeling given in Attachment 10, it has been established that in the calculation of the cumulative effect to the normal KNPP operation from emissions resulting from the decommissioning of KNPP Units 1-4 and normal operation of the Plasma melting facility (PMF, Project 5c) leads to negligible increase of the maximal individual and collective effective doses by 0.5 to 1%. Therefore, recalculation of the dimensions of the already established special statute areas at KNPP is not necessary.	Compliance with the normative requirements for preservation of the environmental components and human health.
To provide consecutive physical barriers over the ways of spreading of radioactive substances in the environment since safety of such a facility is based on the concept of defense in depth.	Chapter 1 includes description of the physical barriers over the ways of spreading of radioactive substances in the environment. The existing ones are completely sufficient to ensure the safety during normal PMF operation.	Compliance with the normative requirements for preservation of the environmental components and human health.

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
Guarantee that during normal operation, expected operational conditions and design based accidents in the facilities, the established dose limits defined in art. 9, i.1 and 2, as well as in i.3 - for the period after the closure of the facility - would not be exceeded as per the above mentioned regulation. For this purpose detectors need to be provided which would assure the on-line monitoring of the radiation gamma-background.	Accepted, indicated in measures it. 6.1.2.1.	Compliance with the normative requirements for preservation of the environmental components and human health.
Develop and implement a Program for in-house radiation monitoring which should be part of the common Program for radiation monitoring of the plant site.	Accepted, indicated in chapter 6.	Compliance with the normative requirements for preservation of the environmental components and human health.
<p>With regard to the analysis and assessment of the significance of the positive and negative effects on the individuals and the possible health risk from the construction and operation of the investment proposal made in the EIA Report</p> <p>According to a statement received by the Ministry of Health Care (MH), the submitted information with regard to the radiation impact of the facility and the risk for the human health is incomplete, unclear and with significant gaps.</p> <p>In the EIA Report the selected model for the assessment of the public dose exposure has not been described and its parameters have not been justified with regard to:</p> <ul style="list-style-type: none"> - the public critical group for which assessments are performed; - the radionuclide composition of main irradiation source (gas and aerosol radioactive releases) and the activity of the annual emissions. 	Accepted, chapters 3 and 4 are supplemented in terms of impact on the population based on available data and performed modeling given in Attachment 10.	Compliance with the normative requirements for preservation of human health.

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
<p>In most of the EIA Report sections the results of the analyses and the investigation are not presented in the necessary degree of evidence provided. In many cases the assessment is only in terms of quality, quantitative analysis is missing. The references to results from the preliminary analyses (Interim Safety Analysis Report for the PMF I-650-RP-0012(B) Rev. 2, 2011) do not contain description of the models used, the output data, the software products, etc. and are insufficient for performing independent assessment of the report conclusions.</p> <p>With regard to the above, the MH gives negative assessment to the quality of the EIA Report. The comments on the specific texts are presented in the attachment to the present letter.</p>	<p>Accepted. Attachment 10 includes the performed “Analysis of the dose rate for the population in the KNPP 30-km monitored area from the gaseous and liquid releases in the environment from the decommissioning process of Units 1-4 and the emissions from the operation of the Plasma melting facility (PMF, Project 5c)”. The conclusions confirm and supplement the findings made in EIA R, because it has been proven by modeling that the additional dose rate from PMF is about 500 times lower than that of the natural gamma background (2.33mSv).</p>	<p>Compliance with the normative requirements for preservation of human health.</p>
<p>Other comments concerning the EIA Report</p>		
<p>The required evidence (specified in letter out. № 26-00-2007/31.07.2012 by the MEW) for performed consultations under article 95, paragraph 3 of the Environmental Protection Act with "other specialized administration and the public concerned" have not been presented in the necessary attachments to the EIA Report. In the tabular form recommended by us, only the expressed statements on behalf of the MEW and MH have been addressed, whereas information is missing on the implementation of the instruction under art. 9 of the EIA Regulation.</p>	<p>Accepted. All additionally received letters with their opinions and statements are presented in chapter 7 of EIAR, and copies of the letters are included in Attachment 6 of chapter 11.</p>	<p>Compliance with the normative requirements for preservation of the environment.</p>
<p>The EIA Report should contain topical data on the regulatory basis used and promulgation of the modifications and the amendments.</p>	<p>Accepted, the normative base in chapter 5 is completely updated.</p>	<p>Compliance with the normative requirements for preservation of the environment.</p>

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
Ministry of Health Comments		
On Chapter 4: "Description, analysis and assessment of the significant effects on the population and the environment resulting from the implementation of the investment proposal".	Accepted, the methodology for calculation of the impacts during IP implementation and during emergencies has been presented.	Compliance with the normative requirements for preservation of human health.
Section 4.1.2 "Possible impact during the operation and the decommissioning of the PMF": The following texts from i.4.1.2.2 "From what has been said it follows that no radiation impact should be expected over the public of the investigated territory", "The observance of these requirements does not provide grounds to expect radiation impact on the public and the economy during the operation of the PMF within the boundaries of the 30 km area of Kozloduy NPP, both on Bulgarian territory and the territory of the neighbouring Romania" are unjustified and have not been substantiated with quantitative assessments.	Accepted. Attachment 10 includes the performed "Analysis of the dose rate for the population in the KNPP 30-km monitored area from the gaseous and liquid releases in the environment from the decommissioning process of Units 1-4 and the emissions from the operation of the Plasma melting facility (PMF, Project 5c)". The conclusions confirm and supplement the findings made in EIAR, because it has been proven by modeling that the additional dose rate from PMF is about 500 times lower than that of the natural gamma background (2.33mSv). The maximal annual effective dose for the population in the KNPP 40-km area (including the 30-km monitored	Compliance with the normative requirements for preservation of human health.

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
	area) resulting from aerosol emissions only 6MBq during normal operation of the Plasma melting facility (PMF) is evaluated at $5.47 \cdot 10^{-10}$ Sv/a, which is barely 0.01% from the total dose rate resulting from all the activities at KNPP site.	
The text from i.4.1.2.3 "Share of the flue gases from the PMF in the total emission from the stack is 0.17 %" contradicts the data presented in Chapter 3 for released activity from the ventilation stacks of the NPP (in 2010 - 28 MBq radioactive aerosols). Even if we accept the assessed value of the PMF discharges of 6 MBq for correct (see comment to section 4.1.9), this is equal to 21% of the total discharges.	Accepted, the remark is included in the relevant EIAR chapter.	Compliance with the normative requirements for preservation of human health.
Section 4.1.3 "Possible impact as a result of accidents": Table 4.1.3-1 with public dose exposure assessment in case of possible accidents refers to the Interim Safety Analysis Report (ISAR). The dose assessment model has not been described and judgment cannot be made whether the conclusion "the impact on the staff, public and environment is negligible" is correct. The same comment applies as well to the values of table 4.1.8.8-1 and the conclusions from i.4.1.8.8, where the relevant texts from section 4.1.3 are repeated with no significant changes.	The methodology and the models for calculation of the dose rate for the population and the personnel are presented in section 4.3.1.	Compliance with the normative requirements for preservation of human health.
Section 4.1.9 "Radiation Impact":		
In i.4.1.9.4 an assessment has been made on the committed public dose exposure (due to inhalation of radioactive aerosols) during normal operation of the PMF. In the textual part of the paragraph the working parameters of the PMF have been indicated according to which the calculated annual activity of the aerosol discharged in the environment is equal to 6 MBq; every single one of these parameters, the final result accordingly, can be	Accepted, the remark has been included in chapter 4.	Compliance with the normative requirements for preservation of human health.

Expressed statements, recommendations, comments, etc.				Accepted/ Not accepted	Reasons
questioned:					
Parameter	EIA REPORT	"Real"	Motive		
Input activity, Bq/g	1.34E+11	1.0E+12	According to the PMF parameters (see table 1.2.3.1-1 of Chapter 1): annual productivity of 250 tons of RAW with design based specific activity of 4×10^6 Bq/kg		
Passed in the smoke gas	15%	57.5%	Assuming that: a) the radionuclide composition of the RAW is 50% ^{60}Co and 50% ^{137}Cs (as per Chapter 1, the NPP typical waste consist of significant quantities of ^{60}Co and ^{137}Cs); b) 15% of Cobalt and the whole quantity of Cesium passes into the smoke gas as a volatile metal (boiling temperature of 671°C , see comment)		
Purification efficiency	99.97%	99.7%	As per items 4.1.2.1, 4.1.2.3, 4.3.3 and 4.4.1		
Output activity, Bq/g	6.03E+06	1.7E+9	$1 \cdot 10^{12} \times 0.575 \times (1 - 0.997) = 1.7 \cdot 10^9$		
Note: The volatile elements (including their radioactive isotopes) - as Cesium, Iodine or					

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
<p>Hydrogen (Tritium) - pass mainly in the output gas [Application of Thermal Technologies for Processing of Radioactive Waste. IAEA-TECDOC-1527, 2007]. The output ("real") activity of 1.7 GBq/g assessed by the National Center for Radiobiology and Radiation Protection (NCRRP) exceeds 6 times the PMF annual emissions criterion indicated (0.3 GBq/g) and differs about 300 times from the value of 6 GBq/g accepted in the Report. The assessment made on the "real" annual emissions question the values from table 4.1.9.4-1 with doses from aerosols inhalation for the public during normal operation of the PMF, and respectively the conclusion that the "Public dose exposure during normal operation of the PMF is negligible".</p> <p>The same comment applies to Section 4.4.2 "Public committed dose exposure during the PMF operation", which literally repeats the text from item 4.1.9.4.</p>		
<p>On Chapter 8 "Expert Conclusion"</p>		
<p>Harmful physical factors</p> <p>The expert conclusion made that "It can be concluded that there will be no impact on the radiation γ-background during the PMF operation and decommissioning activities, including dismantling. Emissions of gaseous RAW during PMF operation and decommissioning are limited to the permitted levels for aerosols and therefore have negligible impact", is not confirmed with the necessarily level of clarity by the texts of the report provided.</p>	<p>Accepted. Attachment 10 includes the performed "Analysis of the dose rate for the population in the KNPP 30-km monitored area from the gaseous and liquid releases in the environment from the decommissioning process of Units 1-4 and the emissions from the operation of the Plasma melting facility (PMF, Project 5c)". The conclusions confirm and supplement the findings made in EIA R, because it has been proven by modeling that the additional dose rate from PMF is about 500</p>	<p>Compliance with the normative requirements for preservation of human health.</p>

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
	times lower than that of the natural gamma background (2.33mSv). The maximal annual effective dose for the population in the KNPP 40-km area (including the 30-km monitored area) resulting from aerosol emissions only 6MBq during normal operation of the Plasma melting facility (PMF) is evaluated at $5.47 \cdot 10^{-10}$ Sv/a, which is barely 0.01% from the total dose rate resulting from all the activities at KNPP site.	
On Chapter 11 "Other information"		
In Attachment № 10 "Disperse modeling of the spreading of contaminants:	The remark has been including by giving a short description of the approach in modeling the distribution of pollutants in Attachment 10 of EIAR.	Compliance with the normative requirements for preservation of human health and the impact on the environmental components.
Maximum ground concentrations of the PMF at Kozloduy NPP (modeling)": results for the spread of the radioactive aerosol emissions have not been presented.	Presented in section 4.3.1.	Compliance with the normative requirements for preservation of human health and the impact on the

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
		environmental components.
<p>The PMF radiation impact assessment made and the human health risk assessment are incomplete. The value accepted in the report for the activity of the annual emissions also questions the radiation impact assessment on the units of the environment.</p>	<p>Accepted, EIAR has been supplemented and updated in chapters 3 and 4. Attachment 10 includes the performed “Analysis of the dose rate for the population in the KNPP 30-km monitored area from the gaseous and liquid releases in the environment from the decommissioning process of Units 1-4 and the emissions from the operation of the Plasma melting facility (PMF, Project 5c)”. The conclusions confirm and supplement the findings made in EIAR, because it has been proven by modeling that the additional dose rate from PMF is about 500 times lower than that of the natural gamma background (2.33mSv). The maximal annual effective dose for the population in the KNPP 40-km area (including the 30-km monitored area) resulting from aerosol emissions only 6MBq during normal operation of the Plasma melting facility (PMF) is</p>	<p>Compliance with the normative requirements for preservation of human health and the impact on the environmental components.</p>

Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
	evaluated at $5.47 \cdot 10^{-10}$ Sv/a, which is barely 0.01% from the total dose rate resulting from all the activities at KNPP site.	
The poor knowledge of the team of experts who prepared the EIA Report in the area of radiation protection and radioecology is obvious in the use of terms and concepts which differ from the generally accepted terminology in these fields (as for example: radiation doses, radioactive dust particles, radiation contamination, radiation exposure, irradiation exposure, radiological areas, radioactive radiation, etc.	The use of terms which differ from the generally accepted terminology is rather a technical mistake due to the translation of the text of the TOR terminology.	Compliance with the normative requirements for preservation of human health and the impact on the environmental components.

Expressed statements/recommendations/comments, etc.	Accepted/ Not accepted	Reasons
<p>III. ON CAR</p> <p>After analysis of the information set out in the CAR and on the basis of the criteria of article 24, para. 3 of the Regulation on the conditions and order for performance of plans, programs, projects and investment proposals compatibility assessment with the subject of the goals of preservation of protected areas (Regulation on CA, prom. <i>SG, issue 73/2007, mod. and am. SG, issue 94/2012</i>), the following was ascertained:</p> <p>Regardless of the fact that as a whole the EIA Report structure is in compliance with the provisions of art. 23, para. 2 of the CA Regulation, we consider that the information provided in it does not provide a possibility for definite conclusions, due to the following:</p> <p>Projects related to the decommissioning activities of Kozloduy NPP Units 1-4 have been described in detail in the DIA Report, but assessment of the possible cumulative effect between them and the current investment proposal is missing. At the same time the cumulative effect is considered only in relation to investment proposals, the comparative analysis of the features which allows the authors to derive a conclusion for the lack of "additional adverse effect" over the subject of protection in the protected areas. The sole and only fact that the assessed investment proposals differ in nature from the current one does not provide grounds for the EIA Report authors for motivation of the lack of additional impact. It is necessary that the EIA Report be amended with cumulative effect analysis both from the similar in nature projects related to the decommissioning activities of Kozloduy NPP Units 1-4 and also from the investment proposals of different nature, where the conclusion needs to be derived not only on the basis of similarity or difference in the characteristics of the individual proposals.</p>	<p>Accepted. In the updated version of DIAR in item 3 ("Description of the IP elements which individually or in combination with other plans, programs and projects/IPs could have a considerable impact on the protected areas or their components") all other IPs on the KNPP territory have been considered, which in combination with the present IP could have a negative impact on the PA. The performed complex analysis of the impacts during PMF construction, operation and closure leads to the conclusion that subject to keeping of the current practices negative impact on the PA is not expected, including cumulative effect in combination with the other IPs. Conclusions from the performed modeling have also been used.</p>	<p>Complies with the normative requirements for cumulative effect.</p>

Information is missing in the DIA Report on the performed terrain studies: duration, time scale (field seasons), observation point coordinates.	Accepted. In the updated CAR in item 11.2.1 The time scale of the observations is indicated.	Complies with the methodology for analysis and assessment of impacts
In the part on the investment proposal impact assessment on the subject of preservation of the birds protection area BG0002009 Zlatiyata, it is assessed that the impact on the Eurasian Bittern would be in a small extent and with total table factor of 1.8, and the impact on the Long-legged Buzzard would be in an average extent and again with a table factor of 1.8. Considering the identical factors, it remains unclear what gives rise to the difference in the level of impact. On the other hand, the assessment for the Long-legged Buzzard is contradictory, since in one place in the report the authors claim that no negative impact is expected on the species, and later they determine "average extent".	Accepted. A technical mistake has been made, as in the summarized table (Table 5.1.2-4) a species with average extent of impact has not been presented. The mistake has been corrected.	Corrected technical mistake.
All of the conclusions for a small degree of impact or for lack of negative impact on the subject of preservation in all of the assessed protected areas, have not been substantiated with the necessary scientific evidence and have not been derived as a result of an expert analysis and quantitative results from a terrain study. What is also found is the inconsistency of the terminology used, as for example: the conclusion for assessment of a level of impact of 1.8 is for "small extent", whereas the scale for the respective value is "very small impact", which also differs from the legend for the respective value described in the part on the "Information for the methods used". The following effects: fragmentation, Disruption of the species composition, chemical changes, hydrological changes and geologic changes are only listed in the text as separate items, but the only text part of the respective item is "not expected". This statement has no substantiation and it has not been proved by the authors.	Accepted. Each species has been reviewed individually and the respective data are presented regarding the status, distribution and numbers in Bulgaria, in the respective protected area and at the IP site (if there are available data – literary and own). Field studies comprise over 155 days during all seasons, which is completely sufficient for analysis and conclusions. According to us (authors of CAR) small extent=small impact. Significant supplements have been made in sections 5.1.3 to 5.1.8.	Clarification of the used methodology for impact assessment. Refinement of terminology.

In the EIA Report fig. 8.1-2 is missing regarding the ornithological environment in the region of the birds protection area BG0002009 Zlatiyata, mentioned on p.89.	Accepted. Fig. 8.1-2 has been presented.	Corrected technical mistake.
On page 89 there is a summary that the impact on the birds species preserved in the birds protection area BG0002009 Zlatiyata, "will be in the form of disturbance of the species". No mitigation measures have been envisaged for this impact.	Accepted. Supplements are made in section 6.1.	Complies with the normative requirements.
In the "Proposals for measures" part only 2 measures have been proposed, one of is to inform the people working for the objectives and the subject of conservation of the protected area (which one is in question has not been clarified), and the second is to observe the requirements of Kozloduy NPP emergency plan in case of emergency. The so proposed 2 measures could not mitigate the expected impact; moreover, during the impact assessment over the birds protection area BG0002009 Zlatiyata, the authors derive the conclusion that "The negative impact will be in the form of disturbance of the species" . In this relation it is necessary to set out specific applicable measures corresponding to the expected impact.	Accepted. Supplements are made in section 6.1.	Complies with the normative requirements.
We draw your attention to the fact that the information presented in the EIA Report on the protected areas falling within the scope of the investment proposal located on Romanian territory should be a subject to the EIA Report in the part concerning the impacts in transboundary aspect.	Accepted. The information on the protected areas on Romanian territory is included in the EIAR in a separate section – 11.5.	Complies with the normative requirements for assessment of transboundary impact.
In relation to all of the above and on the basis of art. 24, para 4 of the CA Regulation, the assessment of the quality of the submitted report for compatibility assessment of the investment proposal is negative. As per art. 14, para 8 of the EIA Regulation and art. 24, para 6 of the CA Regulation, the compatibility assessment report, under art. 34, para 1 of the latter regulation, is returned back for amendment and rework in line with the above comments.		

Table 7.2.1-2 Reference to the letter of the MEW No OVOS-277/28.05.2013 concerning Evaluation of the quality of an additional EIA report and of a reworked Compatibility assessment report (CAR) for investment proposal "Facility for Treatment and Conditioning of Radioactive Waste (RAW) with high volume reduction factor (HVRF) at Kozloduy NPP.

Expressed statements/recommendations/comments, etc.	Accepted/ Not accepted	Reasons
<p>In connection with the aforementioned EIA Report submitted to the MEW with incoming Nr. OVOS-277/26.04.2013, together with the attachments therewith, we hereby inform you as follows:</p> <p>I. As regards the the EIA Report (EIA-R).</p> <p>Following the review of the documents submitted to us, in accordance with art. 14 paragraph 3 item 2 from <i>the Regulation for the terms and procedure for carrying out EIA</i> (Regulation for EIA, adopted with Letter of the Council of Ministers Nr. 59/year 2003, last amended SG, issue 94/2012), the evaluation of the quality of the aforementioned complemented EIA Report is positive, with omissions which are not of material importance when making a decision. Several inaccuracies have been identified, which should be resolved, namely:</p> <p>1. Component "Atmospheric air"</p> <p>Section "Atmospheric air" - Chapter 11, Attachment 10 regarding the modeling of dispersion of atmospheric pollutants states as follows <i>"The calculation model includes the elaboration of four simulation options of the harmful emissions dispersion at the ground atmosphere layer, which are part of the waste off-gases from the site stationary source."</i> At the same time only one option is presented, which related to</p>	<p>Accepted. A technical mistake has been made regarding the number of the models, because in the preliminary investigations several models were reviewed. Later on, in the course of the investigations, the number of models remains 1 and the mistake has been corrected in the EIAR text for public discussion.</p> <p>In the EIAR text, which will be submitted for public discussion, it is stated that the meteorological conditions are taken from the Contracting authority, as well as from the climatic guide of Bulgaria, including "Wind rose". In the EIAR text, which will be submitted for public discussion, the calculations and the model for the FDP₁₀ are also supplemented. The calculations and the model for common dust and FDP₁₀ are made with a deposition rate $W_g = 0.07\text{m/s}$. The supplemented calculations do not change the conclusion regarding the impact, but are more precise.</p>	<p>Complies with the normative requirements for preservation of the air.</p>

<p>calculation of the instant one-hour ground concentration of the harmful substances, and it is not specified how the respective meteorological conditions were selected for the purposes of modeling.</p> <p>The ground concentrations of fine dust particles (FDP) should be calculated. The complemented report calculates the ground concentration only of the total dust.</p> <p>It should be known that the gravimetric deposition (W_g) is zero only for gases. The authors have used zero in the modeling when determining the ground concentration of the total dust. In case the precise size of the particles is not available, the calculations are made with a deposition rate $W_g = 0.07\text{m/s}$.</p>		
<p>2. The "Waters" component - underground waters - the substantial comments and the required data have been resolved in the complemented report. Some inaccuracies have not been corrected, as follows:</p> <p>2.1 Some technical errors are noted in chapter 1 - on the preservation of protected territories - for instance on page 17. Secondary Treatment Chamber it is stated: "The refractory is designed to receive hot gases of about 1300°C from the PTC.", and further down it is said that "The inner refractory layer of the STC will be designed to withstand a maximum temperature of 1500°C."</p> <p>2.2 In chapter 3 - some technical inaccuracies should be corrected in item 3.2.3. Hydrogeology, namely, on page 30: "plain" after proluvial quaternary depositions should be deleted, "Hocene" should be changed to "Holocene".</p>	<p>Accepted. Technical mistake is corrected in chapter 1, page 17.</p> <p>The remark is in regard to a technical mistake and is accepted. It has been removed from the EIAR text, which will be submitted for public discussion.</p>	<p>Correction of technical mistakes.</p>

<p>3. The "Biologic diversity" component In Chapter 3, item 3.10.1 and item 3.10.3 not all protected territories and protected areas are included in the 30 km zone around the NPP. The information in the sentence in item 3.10.3. Protected territories "According to the documents Territories Protection Act there are no protected territories in the area of the municipality Kozloduy" is not true. The protected locality Kozloduy is located on the territory of Kozloduy Municipality; it is declared as such according to the Protected Territories Act.</p>	<p>Accepted. In chapter 3, items 3.10.1 and 3.10.3 the text has been corrected, and all the protected areas and protected territories in the 30-km KNPP monitored area are listed. The text in item 3.10.3 is corrected to include the protected locality Kozloduy.</p>	<p>Complies with the normative requirements for preservation of the protected territories and the biological diversity.</p>
<p>4. In regard to the EIAR analysis and assessment of the significance of the positive and negative impacts on the people and the possible health risks from the construction and operation of IP, MEW has received a statement by the MH, according to which: The presented supplemented EIAR accounts for the MEW remarks in letter Ref. No OBOC-277/13.12.2012. The significantly revised texts of chapter 4 and Attachment 10 provide sufficiently complete information about the radiological impact of the facility and the risk to human health. In order to achieve a higher precision and correctness of the EIAR text, MH finds it necessary to include the following corrections and supplements: 4.1 The text of paragraph 4.1.2.3 (page 50) "The share of the off-gases from PMF in the total releases by AB-2 vent stack is 0.17%, with released activity of 5.48 MBq, according to data for 2011." contradicts the figure stated on the same page for the PMF output activity - 6 MBq per year. The required correction should be made.</p>	<p>Accepted. Corrected in the EIA R.</p>	<p>Complies with the requirements in the technical specification.</p>

<p>4.2 All the comments related to the dose limits according to art. 10 and 11 from the Regulation on the basic norms for radiation protection (prom. SG, issue 73/2004) should be replaced by the requirements of art. 14 and 15 of the Regulation on the basic norms for radiation protection (prom. SG, issue 76/2012).</p> <p>In conclusion, the Ministry of Health gives a positive evaluation on the complemented and corrected EIA report for the above mentioned investment proposal, provided that the EIA-R shall address and resolve the comments as stated above prior to its public consultation.</p>	<p>The dose limits have been corrected in the separate EIA R chapters according to art. 14 and 15 of BNRP-2012.</p>	<p>Complies with the normative requirements.</p>
II. As regards the Degree of Impact Assessment Report (DIAR)		
<p>Based on art. 39, par. 8 from the CA Regulation, a positive assessment is given under art. 24, par. 5, item 2 from the CA Regulation to the quality of DIAR of the IP “the Facility for Treatment and Conditioning of Radioactive Wastes with High Volume Reduction Factor at Kozloduy Nuclear Power Plant”</p>	<p>Accepted.</p>	<p>Complies with the normative requirements.</p>
III. As regards the action to be taken by the Employer:		
<p>Based on the above mentioned, MEW determines the Municipalities of Kozloduy and Miziya to be impacted and you should organize together with them a public consultation on the EIA Report together with all the attachments thereat, including the CA Report. For this purpose you should take the following actions:</p>		
<p>1. As soon as possible, after receiving the present letter, prior to the public consultation of the EIA-R, submit to MEW a copy of the corrected EIA Report, in accordance with the above</p>	<p>Accepted.</p>	<p>Complies with the normative requirements.</p>

comments, on paper and in electronic format.		
2. Provide public access to the EIA Report corrected in accordance with the above comments, including the CAR, for a minimum period of 30 days before the beginning of the public consultation, and a place for submitting written statements.	Accepted.	Complies with the normative requirements.
3. Submit a copy of the corrected EIA Report and all attachments thereat to RIEW-Vratsa.	Accepted.	Complies with the normative requirements.
4. We recommend that you provide to the mayors of the settlements within the 10km zone around Kozloduy NPP site the non-technical summary of the EIA Report.	Accepted.	Complies with the normative requirements.
5. In order to organize a public consultation meeting you should submit a written request to the above mentioned municipalities, with a proposal for the venue, date and hour of the meeting for public consultation, the location for public access to the documentation and for submitting statements.	Accepted.	Complies with the normative requirements.
6. Place, date and time of holding the meeting to be published by the media or by other means at least 30 days before the date fixed by an ad in the appropriate form.	Accepted.	Complies with the normative requirements.
7. Inform MEW in written and present proof for the execution of items 1, 4 and 5 within a 7 days period after that.	Accepted.	Complies with the normative requirements.
IV. As regards the Convention on EIA in a Transboundary context		
You should submit in MEW in English language, on paper and an electronic copy, the EIA Report corrected in accordance with the above mentioned comments, the non-technical summary, and the reworked CA report, which documents were evaluated positively.	Accepted.	Complies with the normative requirements.

7.2.2 Statements of the Romanian consultation on transboundary impacts during the EIA-R elaboration

In regard of the submitted Notification by KNPP to the concerned party according the EIA Convention in transboundary context an answer from Romanian side is received with expressed consent to participate in the EIA procedure and has sent its questions and proposals in this relation, respectively:

Performed Consultations	Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
IDENTIFIED ISSUES RELATED TO NUCLEAR SAFETY AND ENVIRONMENTAL PROTECTION			
GOVERNMENT OF ROMANIA MINISTRY OF ENVIRONMENT AND FORESTS OF THE REPUBLIC OF ROMANIA, Department "Pollution control and impact assessment"	A. We kindly request the following aspects to be included in the PMF ToR and to be considered in the EIAR 1. The types of solid waste to be treated in PMF, the volume, the flows that generated them and the radiological characteristics; please specify if in the PMF there will be treated only Bulgarian waste or third parties waste as well ?	Only waste from Bulgaria, Category 2a will be treated in the facility. Detailed quantitative and qualitative characteristics of the flows and waste volume, and their radioactivity are given in EIAR chapter 1.	Complies with the normative requirements.
	2. The predicted life time of the PMF installation, the dismantling time of installation and the way of treating the waste which result from dismantling the installation.	Chapter 1 of the EIAR includes detailed quantitative and qualitative characteristics of the	Complies with the normative requirements.

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Performed Consultations	Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
		flows and waste volume at the decommissioning stage and dismantling of the equipment. Chapter 4 includes estimation of the expected impacts.	
	3. The legal limits for the radioactive effluents which are discharged in environment (surface/ underground waters, in air; etc, and the monitoring method of these effluents).	Chapter 3 presents the existing state regarding KNPP emissions before implementation of the IP. Chapter 4 presents estimation, considering the cumulative effect, and it has been found that violation of regulations resulting from IP implementation is not expected.	Complies with the normative requirements.
	4. Specify the annual processing capacity considering that from mathematical calculations result a value which is different from the capacity of 250 tons/year mentioned in the Notification	Detailed information on these questions is provided in EIAR Chapter 1.	Complies with the normative requirements.
	5. During the treatment process you are using other substances as well, (e.g. ammonium, nitrogen), please, specify the storage capacity of such substances on the facility site.	Detailed information on these questions is provided in EIAR Chapter 1.	Complies with the normative requirements.
	6. We kindly request the following data related to the water used in technological process:	Detailed information on these questions is provided in EIAR Chapter 1.	Complies with the normative requirements.

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Performed Consultations	Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
	<p>a) complete information about cooling water e.g: the source of cooling water, the cycle provided (closed/opened), the way of discharging, the temperatures characteristics and other pollution indicators if the cooling water will be discharged in surface water;</p> <p>b) complete information about the characteristics of the water used in the process as a wastewater e.g: the source of supply (potable water/surface water/technological! water with special treatment etc), the place of discharge, the values of the pollution indicators expressed in concentration-mg/l and total annual loading -kg/y of pollutant. .</p> <p>c) the operating way of the PMF installation (continuously or discontinuously) considering the different data mentioned (nominal flow of 0,625 m³/h leads to 15cm/day and 5475 cm³/year of water consumption), while the water consumption mentioned in the Notification is 2500 cm³/ year.</p>	<p>Chapter 4 presents an estimation of the IP impact on waters, considering the cumulative effect.</p> <p>In the same chapter it is stated that there is no need to change the Permits for water use and discharge of waste water.</p>	Complies with the normative requirements.
	<p>7. Considering the existing natural protected areas ROSCI 0045 Coridorul Jiului and ROSPA 0023 Confluenta Jiu Dunare please specify the sensitive areas which could be affected by the pollution.</p>	In an EIAR Attachment there is a Compatibility Assessment Report for the IP regarding the preservation of protected areas.	Complies with the normative requirements.
	<p>8. Please specify the European legislation that regulates the radioactive waste treatment and which will be used in the project.</p>	Directive 2009/71/Euroatom	Complies with the normative requirements.

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Performed Consultations	Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
	<p>9. Please specify if the PMF is an incineration plant considering the definition of the incineration plant (equipment or technical unit fixed or mobile designed for thermal treatment of the waste with or without recovering the heat; thermal treatment means incineration by oxidation or other thermal treatment procedure e.g pyrolysis, gasification or plasma processes.</p>	<p>PMF is based on a plasma chemical method for treatment of radioactive waste. RAW is decomposed and melted in the Primary treatment chamber (in absence of oxygen) at a high temperature. Thus, the non-combustible components form a vitrified slag, and the generated volatile hydrocarbons, carbon dioxide, etc. are directed to the Secondary treatment chamber to achieve full combustion of the primary oxide components, such as CO₂, H₂O, SO₂.</p>	<p>Complies with the normative requirements.</p>
	<p>10. Explain why under the chapter "Results"(pag.7) and chapter "Additional Information/ Comments"(pag.10) of the Notification it is mentioned the Directive nr.76/2000/CE for waste incineration, considering that in this Directive, under art.2, the radioactive wastes are excluded.</p>	<p>The remark is accepted and Chapter 11.3 includes a comparison with the best available techniques.</p>	<p>Comparison with the available techniques</p>
	<p>11. Please specify what "almost fully" means, within the statement from the chapter "Results"(pag. 8)" <i>the rest amount of the radioactivity together with the fly ash from the flue gas are caught almost fully in the filter</i>, What is the percentage of radioactivity released?</p>	<p>The assessment is presented in EIAR item 4.3.3.</p>	<p>Complies with the normative requirements.</p>

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Performed Consultations	Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
	12. We kindly request to assess the radiological impact on environment and human health within a radius of 30 km from the PMF installation, considering the importance of this issue in taking the decisions, and also considering that population on the Romanian territory in area of influence of the PMF is around 23 communities.	The recommendation has been considered and the estimates concern the 30-km area.	Complies with the normative requirements.
	13. Please include in the EIA Report an analysis of dispersion of all types of pollutants emitted within a radius of 30 km around the plant, considering all possible impacts on environmental and human health of the pollution resulted from the treatment process.	The recommendation has been considered and the estimates concern the 30-km area.	Complies with the normative requirements.
	14. Please assess the cumulative impact (radioactive and non-radioactive) of all 3 projects developed in Kozloduy area (PMF, dismantling of NPP and the nuclear deposit) because of a likely cumulative transboundary impact on Romania: a) considering the dismantling period of time -2011 -2035 mentioned in the Notification for the project "Dismantling of units 1-4 of Kozloduy NPP" please present a time table of the development of all 3 projects, specifying the construction period of time, the normal operation period of time, the dismantling period and recovery of the site period. We are very much interested what the cumulative impact of all 3 projects is in the overlapping periods.	The recommendation has been considered and the estimates in chapter 4 represent the cumulative impact of the IP on the factors and components of the environment.	Complies with the normative requirements.

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Performed Consultations	Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
	<p>b) Specify in detail the sources of pollution, an estimation of the radioactive and non- radioactive emissions; the impact on environmental and human health in Romania, the legal requests for monitoring of the pollution, the constructive and management measures proposed in order to reduce the cumulative impact of pollution on environment and human health in Romania.</p> <p>c) Specify the additional measures to be implemented in case of identification of a cumulative and synergistic effects.</p>	<p>The measures are indicated in EIAR Chapter 6, and only subject to their exact fulfillment the experts give positive statement on the IP implementation.</p>	
	<p>B Assessment of sensitive environmental aspects related to the Plasma technology</p> <p>The Plasma melting technology is advanced technology related to radioactive waste processing. In Europe such installation is built and operation in Belgium (CILVA) and in Switzerland (ZWILAG). Despite of these, there are some sensitive aspects that should be assessed in frame of Environmental Impact Assessment documentation, which will be issued at later stage:</p> <p>1. The problem of radioactivity concentration in the resulted slag: is claimed attention and special treatment on how the waste slag will be conditioned so that packages can be interim stored in a safe manner on-site KNPP, including specifying how the conditioning of such packages will be done in order to meet the wastes acceptance criteria, W AC, associated to the Low and Intermediate level Wastes Final Repository which is expected to be built nearby NPP Kozloduy site.</p>	<p>Detailed information on these issues is presented in EIAR Chapter 1.</p> <p>The waste criteria for acceptance in the NDF RAW are determined as a requirement to the end waste from PMF, and in chapter 4 an estimate of the impact by the RAW generated by the PMF on the components of the environment is made.</p>	<p>Complies with the normative requirements.</p>

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Performed Consultations	Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
	2. The problem of qualitative and quantitative emission limits authorized for chemicals: further details are needed regarding the alignment of Bulgarian regulations associated to emission limits allowed for toxic and hazardous chemicals (as stated by the Bulgarian side in the notification), in terms qualitatively and quantitatively, with European legislation and regulatory requirements equivalent in Romania.	Environment Impact Assessment is made in Chapter 4, and in chapter 1 the emissions from the facility are compared to the normative requirements.	Complies with the normative requirements.
	3. The problem of accident and hazard analyses: a special attention has to be paid to risk analysis (e.g., HAZOP) and choice of postulated accident (design basis accident) that have to quantify all possible scenarios associated with fire and explosion hazard, with nearby human activities, including the associated common cause events (e.g., earthquake, flooding), given that the PMF installation processes metallic materials melt at high temperatures, which might change the risk level from radioactive hazard to industrial hazard or both, in some accident conditions, which can significantly affect the environment over considerable distances.	Detailed analysis of the accidents and risk is performed in the document Assessment for the safety analysis. The document is an integral part from the project documentation which is subject to approval by the Regulator. Without approval of this document, PMF construction is not possible.	Complies with the normative requirements.
	4. The problem of technical specifications for operation and degradation management measures: it must be rigorously and systematically address a set of technical specifications related to operation of that objective, including the development of specific programs for aging management for relevant systems, structures and components, taking into account the terms source, the characteristics of the technological process, the extended lifetime of the PMF installation, the ultimate heat sink, the safety design criteria and the possible negative environmental impact on large areas, in case of failures or accidents resulting from the neglect of these issues.	The statement has been considered in the development of EIAR chapter 1, and the possible consequences and the risk of accidents are indicated in EIA R Chapter 4.	Complies with the normative requirements.

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Performed Consultations	Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
	5. From the point of view of the environmental impact, incineration of radioactive waste is regarded as 'a method with a higher environmental impact than other volume reducing methods (such as super compaction, for ex.), because it can lead to emission of radioactive and non-radioactive pollutants. Therefore, we kindly request the future documentation to detail the characteristics of the waste to be incinerated, in terms of volume, source and level of activity.	EIAR chapter 1 presents characteristics of the generated waste in terms of volume, source and activity levels. EIAR chapter 4 presents an estimate of the waste impact on the environment.	Complies with the normative requirements.
	6. The future technical documentation should also include a facility conceptual decommissioning plan, including the management of radioactive waste generated during this activity.	According to the normative requirements, the Safety analysis assessment, which is an integral part of the project documentation, will contain a “Decommissioning concept”, as well as “RAW management during decommissioning”	Complies with the normative requirements.
	7. <i>"Construction is planed to start in January and to finish in August 2013"</i> . Taking into account the long period of time which is necessary in general to get all the agreements and permits for a new nuclear facility and keeping in mind that plasma melting is a relatively new technology, please let us know if the mentioned terms are fix or they can be changed.	The planned terms for commissioning of the facility correspond to the plans for intensive decommissioning activities of Units 1-4 and the need for releasing of storage areas. It is important to note that in all cases the observation of these terms will not be at the expense of quality of the project and ignoring the requirements and instructions in terms of permits and orders issued during the licensing process.	Complies with the normative requirements.

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Performed Consultations	Expressed statements, recommendations, comments, etc.	Accepted/ Not accepted	Reasons
	8. The Environmental impact Assessment Report which will be sent to Romanian Ministry of Environment: and Forests should include the potential radiological and no radiological releases, for all the facility operating conditions.	All potential radiation and non-radiation releases for all operating conditions of the facility are reflected in EIAR chapter 1 and 4.	Complies with the normative requirements.
	9. We kindly ask you to mention the foreseen PMF's lifetime and how it was correlated with the decommissioning plan of the 4 Units of KNPP.	In the Introduction and chapter 1 the expected terms and stages of PMF commissioning are described.	Complies with the normative requirements.

Regarding the ToR for the IP EIA scope and content sent for <i>consultations</i> to Romania, according to the EIA Convention in transboundary context, MEW has received an answer by which Romania sends its questions and proposals in this regard, namely:			
Attachment 1 to Letter Ref. No 3674/RP/01.10.2012 on the ToR for the EIA scope and content			
A. Information related to the water in technological process:			
MINISTRY OF ENVIRONMENT AND FORESTS OF THE REPUBLIC OF ROMANIA , Department "Pollution control and impact assessment" <i>Appendix 1 to Letter №3674/RP/01.10.2012 on the ToR for the EIA scope and content</i>	1. At the point 3.8.2, it is necessary that the obtained monitoring data to be included in the EIA and compared with previous similar data, both national and JDS 2 data base for the radiation and non-radiation indicators.	EIAR chapter 3.2 is based on a comparison of the performed analyses of the input data received for the past three years – of radiation and non-radiation indicators. JDS 2 database is available only for 2007. For EIA it is more suitable to use data for a larger time interval regarding an area close to the IP – Danube river close to KNPP site.	Complies with the normative requirements.
	2. At the point 3.8.2.1., it cannot be told that only the mentioned indicators offers information about chemical pollution; there is a much longer list of chemical substances and compounds that assess chemical characterization at EU level; Maybe it can be told that these indicators are mostly used for revealing possible accidental pollution of waters. It is normally that, besides these general indicators, to be analyzed and quantified all substances mentioned in chapter 1.2.2, as well as the assessment of possible presence and concentrations in waters. Furthermore, besides the national norms from table 3.8.2.1.1., the obtained data should be compared at least with ICPDR norms for Danube, for having a homogenous view of the	Chapter 3.2 (description of the indicators). Chapter 1.2.4, 4.3 and 4.1.2 (data on all used substances). The text according item 3.8.2.1 of ToR, and according to EIAR confirms that the referred indicators are namely “The key indicators used for the assessment of the chemical status of surface waters ...” Information on all substances included in the process is presented in items 1.2.2.4, 4.3.6, 4.1.2.11 and 8.4 from EIAR. It is necessary to consider that the dust and ashes in the flue gases (including heavy metals and metal oxides) will be captured by the bag filter and the HEPA filter, which excludes the possibility for release of such contamination in the waste waters.	Complies with the normative requirements.

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	approach.		
	3. In a similar way, as for point 2., the quality of Ogosta River must be analyzed, as well as the quality of other rivers in the vicinity of the project area. All data must be present as they are, both comparison with previous status and ICPDR norms must be mentioned also. Similar for other rivers in the discussed area, as Iskar, etc. All presented data must be assessed back to back with European laws for protection of population and environment, mainly (in this case) norms for ecological and chemical status of waters (according to Directive 2000/60/EC) and norms for different water uses.	Chapter 3.2 The waste waters from the industrial sources around KNPP are discharged only in the Danube River. Therefore, control of the pollution indicators is performed on his river only. As a base for comparison of the indicators, in EIAR item 3.2 there is information regarding the water quality of the Ogosta River.	Complies with the normative requirements.
	4. The chemical indicators mentioned in table 3.8.2.1.1. are, in present, part of assessment of ecological status. In this respect, the ecological status, as well as the prediction of reaching or not the "good status" within Directive 2000/60/EC must be included also in the EIA.	Chapter 3.2 and 4.1.2. The ecological status is assessed according to the requirements of Directive 2010/75/EC effective 07.01.2011, which represents the current requirements regarding the limits of the industrial emissions (integrated pollution prevention and control) for the waste incineration facilities. It is necessary to consider that all waste waters generated by the PMF will be processed in the Controlled area by evaporation. The vapor condensate can be reused, and only the excess condensate will be released in the Danube river. Due to that the impact on the water quality will be very insignificant (chapter 4.1.2 of EIAR).	Complies with the normative requirements.

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	5. The chapter 3.8.2.2 must offer also data about the analyzed indicators, measured values and comparison with previous status, using both national (if exist), IAEA norms and ICPDR data.	Chapter 3.2. EIAR presents data regarding the analyzed indicators in item 3.2.	Complies with the normative requirements.
	6. All the other remarks referring to surface waters from the previous document must be taken into account in detailed description in the EIA study.	All remarks by Romania presented to the moment are reviewed in detail and reflected in the ToR and EIAR. Chapter 11.5 of EIAR is developed especially to consider the issues brought up by Romania.	Complies with the normative requirements.
	7. The last, but not the least, is to present the cumulative impact of all activities developed or under preparation for future development in the mentioned area, taking into account that this project is not the only one and all the other projects use water and discharge waters in the same river. Even each project states that the discharged waters are not significant in comparison with Danube flow and indicators load, the cumulative discharges could lead to significant impact.	Chapters 4.1.10 and 11.5 (of this document). All cumulative impacts resulting from the activities in this region are considered in items 4.1.10 and 11.5 of EIAR.	Complies with the normative requirements.
	8. Concerning groundwater, text explanations are confusing without references to maps with boreholes situation and flow direction and to the hydro geological cross-sections. We consider that schematic maps and cross-sections should be included in order to better assess and understand the impact.	Chapter 3.2. References to maps with the location of the drilling samplers and the flow direction, as well as to the hydrogeological profiles are presented in item 3.2 of EIAR.	Complies with the normative requirements.

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	9. Data on the groundwater abstractions and discharges on the studied groundwater is missing. We consider this data very important, taking into account the strong relationship between the chemical and quantitative status of groundwater and the mention (page 59) that the aquitard between the Quaternary aquifer and the Pliocene aquifer below is imperfect.	Chapters 3.2 and 4.1.2.4. Data on the groundwater abstractions and discharges are presented in item 4.1.2.4 of EIAR. Impact on the chemical state of the ground water is not expected, as direct or indirect discharge of waste water into ground water bodies is not planned. The water abstraction from ground water bodies is minimal compared to the quantity used by KNPP.	Complies with the normative requirements.
	10. Subchapter 3.8.3.2 should be considerably detailed taking into account the pollution by tritium already occurred. Finding and removal of the sources of the pollution and other measures to improve groundwater quality should be provided. Also the natural radioactivity of groundwater should be proved by tests previous to the Kozloduy Power Plant construction.	Chapter 3.2. Tritium is generated in the reactor area, as result of the division in the nuclear fuel. During the operation of this facility tritium will not be generated, and there will be no increase of tritium in the environment. Nevertheless, for information purposes, in EIAR item 3.2 data regarding the tritium contamination status is presented.	Complies with the normative requirements.
	11. Referring to air pollution, a simulation about the diffuse pollution from rain water and run-off water must be also presented (models, predictions, dispersion wave) both for radiation and non - radiation indicators.	The level of air contamination will be below the admissible limit according to EU norms. Te modeling of maximal ground concentrations performed in chapter 11, Attachment 10 shows that due to the low values the possible impact on the quality of rain waters is negligibly low (insignificant).	Complies with the normative requirements.

	B. Considering the existing natural protected areas ROSCI 0045 Coridorul Jiului and ROSPA 0023 Confluenta Jiu Dunare , we consider necessary to include also the following issues:		
	1. The impact of the project on species of flora and wild fauna located inside or outside of the natural protected areas, but in the project areas, on the both banks of River Dunarea.	Chapters 4.1.4, 4.1.5 and 11.5 (this document). Analysis of the possible impacts within the project territory on the objects from Nature 2000 on Romanian and Bulgarian territory are presented in items 4.1.4, 4.1.5 and 11.5 of EIAR.	Complies with the normative requirements.
	2. The cumulative impact with other projects developed on the proposed site or in the neighborhood which could damage the natural capital from both states.	Chapters 4.1.4, 4.1.5 and 11.5 (this document). Analysis of the possible impacts within the project territory on the objects from Nature 2000 on Romanian and Bulgarian territory are presented in items 4.1.4, 4.1.5 and 11.5 of EIAR.	Complies with the normative requirements.
	3. Measures for mitigation the impact of the project on the biodiversity and also provide dates about the residual impact after their implementation.	Chapters 6, 8 and 11.5. The mitigation measures regarding the biological diversity are reviewed in items 8.8 and 11.5 of EIAR.	Complies with the normative requirements.
	C. In general terms and in the available / provided documentation, the position of the Bulgarian can be considered acceptable. However, there are issues that require a greater degree of detail, even at this phase level of the project. These issues should at least be considered and should be confirmed that they will be treated or highlighted in the future environmental impact report and that it will impose a structure targets or be specified in the ToR. The following topics require a breakdown by the Bulgarian side:		
	1. Attachment 7, B.3. Considering the Bulgarian response: "A detailed accident and risk analysis is completed in the Safety Analysis Report document. This document is an integral part of the project documentation which is subject to regulator's approval. It is impossible to build the PMF without the approval of this document", we would still like the ToR to contain at least the postulated initiating events list, including the identification of the maximum credible accident in terms of frequency and radiological consequences. Our	Chapter 4.1.3, 4.1.8.8. The list of determined initiating events, and the analysis of the possible impacts resulting from accidents is presented in item 4.1.3, 4.1.8.8 and 4.4.3 of EIAR.	Complies with the normative requirements.

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	request has its justification in the fact that the accident analysis will be part of a licensing documentation (SAR) at which the Romanian side has no access as a tool to demonstrate the suitability of radiological / industrial safety for this project. This requirement is minimal and should not be negotiable.		
	<p>2. Attachment 7, B.4. Considering the Bulgarian response: „The aging processes are considered in the facility design. The possible negative impacts shall be assessed in the EIA Report", we believe that it is necessary to confirm that the document referenced as Technical Specifications (known as the Limiting Conditions for Operation) will be issued based on which the whole operating process of the mentioned facility should be performed. Our request has its justification in the fact that developing such a licensing process support document will provide an additional guarantee that the safety limits, the operation and design features and administrative controls are defined, identified and evaluated, in liaison with the demonstration of the radiological safety, objectives, principles requirements and best operating practices.</p>	<p>The description of the licensing process is included in the SEP (Stakeholder Engagement Plan), chapter 5 and the NTS. In the Intermediate Safety Analysis Report – the document needed for the approval by the nuclear regulator, there is an item (Equipment aging management), which considers the planned measures during the design, operation and maintenance, measures to avoid accidents due to the change in materials resulting from aging. Some of the preventive measures are included in the requirements to: the materials for construction of the PMF equipment; the production process of the PMF elements; the operational conditions, etc. Also, regarding aging, the feedback from the accumulated operational experience will be properly considered. During PMF repair outage the equipment will be checked for deviations from the normal state, damages, corrosion, etc. During the elaboration of the Technical Specification (developed at the facility commissioning stage) all the limitations and requirements resulting from the design stage will be considered, including those regarding aging management.</p>	Complies with the normative requirements.