

Attachment 6

Copies of the received written statements on the ToR for the scope and content of the EIA-R of the “Facility for treatment and conditioning of solid radioactive waste with a high volume reduction factor at Kozloduy NPP

Translation from Bulgarian



REPUBLIC OF BULGARIA

MINISTRY OF ENVIRONMENT AND WATERS

Ref. Nr. 26-00-3177/19.10.2011

TO

MR. ALEKSANDAR NIKOLOV
EXECUTIVE DIRECTOR OF
"KOZLODUY NPP" PLC
3321, Kozloduy

COPY:

MR. DILYAN PETROV
EXECUTIVE DIRECTOR OF
STATE ENTERPRISE "RADIOACTIVE WASTE"
51 James Bourchier blvd. 18th floor Sofia

Your Ref. Nr. 6254/04.10.2011

Subject: Terms of Reference to define the scope and the content of the Environmental Impact Assessment (EIA) for an investment proposal for building a "Facility for plasma melting, treatment and conditioning of radioactive wastes (RAW) in Kozloduy NPP".

DEAR MR. NIKOLOV,

In relation to the Terms of Reference to define the scope and the content of the environmental impact assessment (EIA) for the aforementioned investment proposal, submitted to the Ministry of Environment and Waters (MEW), we have the following point of view:

I. The structure of the Terms of Reference complies with the regulations to a certain extent, but as regards its content there are substantial omissions, therefore it has to be re-worked:

1. The investment proposal's characteristic (item 1 from the ToR) does not contain the required information under art. 10 paragraph 3 point 1 from *the Regulation for the conditions and the order for carrying out EIA* (Regulation for EIA, adopted with Letter of the Council of Ministers Nr. 59/year 2003, last amended SG 3/2011). Item 1.3. is not developed in essence and the following are not determined - the type and the quantity of the expected waste; emissions in waters, air and soils; noise levels; vibrations and radiation resulting from the activity subject of the investment proposal.

2. No data are presented on the considered alternatives that led to the choice of the proposed technology.

3. Item 3 is not developed in essence, no environmental characteristic is provided and no forecast of the expected impacts is made.

4. The proposed structure of the EIA report complies with the provisions of art. 96 paragraph 1 from the Environmental Protection Act in general. It should be noted that item 12 and item 13 of the proposed structure of the report should be in conformance with the specific procedure, namely that the assessment under art. 99a paragraph 1 from the Environmental Protection Act does not apply to that

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investment proposal, and that the preparation of a report on the assessment of the level of impact on protected areas has already been requested.

5. The information provided in item 7 of the Terms of Reference contains additional requirements which do not ensue from the national legislation regulating the EIA procedure. In case you would like to have these data in the Terms of Reference, they should be taken out in a separate item, clearly differentiating the requirements of the regulations from the requirements of the funding institutions.

6. Item 8 from the Terms of Reference contains several positions, part of Annex Nr. 2 of the EIA Regulation and "contractor-client" requirements which relate to the relations between "Kozloduy NPP" PLC as an Employer and the team that will work out the EIA documentation.

In view of the afore stated you should submit to the MEW a re-worked Terms of Reference on the scope of the assessment for an opinion, taking into account the above omissions.

II. Regarding the Convention on EIC in a Transboundary context.

Since the proposed activity relates to item 3 from Annex Nr. 1 to the Convention and the assessment made on the presence of significant negative impacts on the environment resulting from its implementation, on the grounds of art. 98 paragraph 1 from the Environmental Protection Act, you should prepare and submit to MEW information (in English language) in the format adopted with Decision I/4 at the First Meeting of the Parties to the Convention on EIA in transboundary context. The form is accessible at the following web site: <http://www.unece.org/env/eia/notification.htm>. The information will be sent to the Republic of Romania being the nearest country to the location of the investment proposal. You can attach the re-worked Terms of Reference on the scope of the EIC (in English language) to that information.

In case the Romanian country declares its consent to participate in the EIA procedure, apart from the results from all consultations carried out in the Republic of Bulgaria, you should take into account also their statement, when working out the final version of the Terms of Reference and when developing the EIA report.

Sincerely yours,

EVDOKIA MANEVA

DEPUTY MINISTER

Translation from Bulgarian

KPMU/INC/11-903
Date: 3 Nov. 2011

REPUBLIC OF BULGARIA
MINISTRY OF HEALTH
Sofia-1000, 5 Sv. Nedelya sq., tel. 9301268, fax 9811833

Outgoing Nr. № 26-00-1238
Sofia, 28.10.2011

Seal Kozloduy NPP PLC Incoming Nr. 6006 Date: 01.11.2011

M.Yankov
Iv.Andreev
For action!

TO
MR. ALEKSANDAR NIKOLOV
EXECUTIVE DIRECTOR
KOZLODUY NPP PLC
3321 KOZLODUY
Your Re. Nr. 6253/04.10.2011

DEAR MR. NIKOLOV,

In response to your letter received by the Ministry of Health regarding the submission of Terms of Reference for an EIA for a facility for treatment and conditioning of solid radioactive waste with high reduction volume in "Kozloduy" NPP, according to art. 10 para 7 from the Ordinance for the conditions and order for implementing EIC, we herewith inform you about the following:

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.

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.

CHIEF STATE
HEALTH INSPECTOR: signature illegible
D-R ANGEL KUNCHEV
Seal

Translation from Bulgarian

Seal

Kozloduy NPP PLC

Inc. Nr. 1412

Date: 14.03.2012

REPUBLIC OF BULGARIA
MINISTRY OF ENVIRONMENT AND WATERS

Outgoing Nr. 26-00-3177/12.03.2012

MR. ALEKSANDAR NIKOLOV

EXECUTIVE DIRECTOR

KOZLODUY NPP PLC

3321 KOZLODUY

Your Ref. № 1295/13.02.2012

MR. DILYAN PETROV

EXECUTIVE DIRECTOR OF

STATE ENTERPRISE "RADIOACTIVE WASTE"

Nr. 52A D-R G.M.DIMITROV BLVD. 6th FLOOR

1797 SOFIA

Subject: Terms of Reference to define the scope and the content of the Environmental Impact Assessment (EIA) for investment proposal for construction of a "Facility for treatment and conditioning of radioactive wastes (RAO) with a high volume reduction factor (HVRF) in Kozloduy NPP".

DEAR MR. NIKOLOV,

In relation to a revised ToR for the scope of the EIA for the above investment proposal, that was submitted to the MEW, we hereby inform you that:

1. The Terms of Reference that you submitted is prepared in compliance with the requirements of the regulations and consistent with our statement issued with letter Ref. № 26-00-3177/19.10.2011 of MEW. The supplemented ToR addresses the significant omissions established in its previous version with regard to its content.
2. The supplemented ToR for the EIA was sent to the director of the Water Management Basin Directorate Danube Region with centre located in Pleven, to submit a competent statement in the meaning of art. 4a, para 2 from the *Ordinance for the conditions and the order for implementing environmental impact assessment /the ELA Ordinance/*. In that relation, in accordance with the response received by the MEW, the investment proposal is admissible from the point of view of reaching the environmental objectives and the measures to achieve a good condition of the waters and the areas for their protection set in the River Basins Management Plan for the Danube region.
3. We draw your attention to that fact that in the course of the investment proposal procedures we have established a certain inconsistency in its formulation in the submitted documentation, namely: Decision Nr. 26-PR/2010 of the Minister of environment and waters for implementing an Environmental Impact Assessment relates to investment proposal "Facility for plasma melting, treatment and conditioning of radioactive wastes (RAW) in Kozloduy NPP", whereas the Terms of Reference that you have submitted on the scope of the EIC relates to investment proposal for constructing a "Facility for treatment and conditioning of radioactive wastes (RAW) with high volume reduction factor (HVRF) in Kozloduy NPP".

With a view to the aforementioned you should address this inconsistency in the title of your proposal.

4. On the occasion of the Notification to an affected party pursuant to the Convention on environmental impact assessment in a transboundary context, that you have submitted to MEW, please, be informed that it was sent to the Republic of Romania. In that relation, a response was received by MEW, whereby the Republic of Romania states they are willing to participate in the EIA procedure and they send their questions and proposals.

Regarding the above, please find attached to the letter herewith, the questions and comments identified by the Romanian part, which should be incorporated in the ToR for the EIA and should be taken into account when developing the EIA Report.

In relation to all that has been stated above, we expect from you to submit to us a final version of a Terms of Reference for the scope of the assessment (one copy in Bulgarian and one copy in English), which should incorporate the comments of the Ministry of Environment and Forests of Romania, as well as all the expressed opinions and statements on the investment proposal until now.

Attachment: According to the text

Sincerely yours,

/sign. ill./

EVDOKIA MANEVA

DEPUTY MINISTER

Seal of MEW

Sofia 1000, 22 Maria Luisa blvd.

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REPUBLIC OF BULGARIA

MINISTRY OF ENVIRONMENT AND WATERS

Outg. № 26-00-2007/31.07.2012

Kozloduy NPP Plc.
Inc. № 4415
Date: 03.08.12

TO
MR. VALENTIN NIKOLOV
EXECUTIVE DIRECTOR OF
KOZLODUY NPP Plc.
3321 KOZLODUY

Your ref. № 4779/11.07.2012

CC:
STATE ENTERPRISE
“RADIOACTIVE WASTE”
52 A “Dr. G. M. DIMITROV” Blvd., fl. 6
1797 SOFIA

Reference: Procedure for the Environmental Impact Assessment (EIA) for the investment proposal for construction of a Facility for Treatment and Conditioning of Solid Radioactive Wastes (RAW) With a High Volume Reduction Factor (HVRF) in Kozloduy NPP

DEAR MISTER NIKOLOV,

In relation to the submitted to MEW revised Terms of Reference for the scope of the EIA for the abovementioned investment proposal, we would like to inform you on the following:

The supplemented Terms of Reference for the scope of the EIA for the investment proposal for construction of a Facility for Treatment and Conditioning of Solid Radioactive Wastes (RAW) With a High Volume Reduction Factor (HVRF) in Kozloduy NPP has considered the identified questions issued on behalf of the Ministry of Environment and Forests of the Republic of Romania.

With regard to the above, the Terms of Reference for the scope of the assessment provided by you in English language has been issued to the Republic of Romania as a stakeholder party, in line with the EIA Convention in transboundary context, which has expressed desire to participate in the EIA procedure. After a statement on the submitted Terms of Reference has been received from the Republic of Romania, you will be duly informed for the purpose of taking it into account in the development of the EIA Report.

We inform you that the further actions that you need to undertake with regard to the continuation of the EIA Procedure are as follows:

1. The preparation of the EIA Report should be assigned to a team of experts with a manager who possess academic master's degree and meet the requirements of article 83 of the *Environmental Protection Act* (EPA). The preparation of the EIA Report should be in compliance with the Terms of Reference under article 10, paragraph 3 from the *Ordinance for*

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the Conditions and the Order for Implementing Environmental Impact Assessment and the provisions of article 96, paragraph 1 from the EPA.

2. Along with the necessary attachments to the Report proof for consultations held under article 95, paragraph 3 of the EPA, accompanied by a record with indicated motives for the accepted and the rejected comments and recommendations should be presented. In this relation we would like to recommend you to use the following tabular form:

№	Consultations held (municipality/ administration/ company, etc.)	Statements/ Recommendations/Notes, etc. made	Accepted/Rejected	Motives

We remind you that with Decision № 26-IIP/2010 by the Minister of Environment and Waters, in i.VI the requirements with regard to the Compatibility Assessment Report (CAR) of the investment proposal have been indicated.

3. Subsequently, the prepared EIA Report should be submitted to MEW with attached CAR for quality assessment. On submission of the report fee should be paid in the amount of (1500 BGN + 280 BGN) on the grounds of article 22, paragraph 2 from *The rate of the taxes collected in the MEW system*. Payment of the tax should be made by bank transfer to the following account:

IBAN BG35 BNBG 9661 3000 1387 01
BIC BNBGBGSD

Sincerely yours, [sgd. ill]

EVDOKIYA MANEVA [MEW seal]
DEPUTY MINISTER

Outg. № OBOC-277/13.12.2012

KPMU/INC/12-1041

Date: 18 Dec 2012

TO
MR. VALENTIN NIKOLOV
KOZLODUY NPP PLC.
EXECUTIVE DIRECTOR
3321 KOZLODUY
To your ref. № 7701/08.11.2012

COPY TO:
MR. DILYAN PETROV
EXECUTIVE DIRECTOR
OF STATE ENTERPRISE "RADIOACTIVE WASTE"
BLVD. 52A D-R G. M. DIMITROV, FL. 6.
1797 SOFIA

EXECUTIVE ENVIRONMENT AGENCY

BASIN DIRECTORATE FOR WATER MANAGEMENT IN THE DANUBE RIVER REGION
BASED IN PLEVEN (BDWMDR)

RIEW-VRATSA

Reference: Quality Assessment of the EIA Report and the attached to it Compatibility Assessment Report for the investment proposal for the Facility for Treatment and Conditioning of Solid Radioactive Wastes with a High Volume Reduction Factor at Kozloduy NPP.

DEAR MISTER NIKOLOV,

In relation to the above mentioned EIA Report together with all the attachments to it submitted to the MEW for Quality Assessment, we would like to inform you as follows:

I. With regard to the EIA Report.

After review of the submitted documentation, in line with article 14, paragraph 4 of the *Regulation for the Conditions and the Order for Implementing Environmental Impact Assessment* (Regulation on EIA, accepted with CMD № 59/2003, later modified SG, issue 94/2012), the quality assessment for the above mentioned EIA Report is **negative**, whereas the information presented is not complete and it is insufficient for the taking of decision, moreover, a written motivated negative statement by the Ministry of Health Care was received. In relation to the gaps found during the review of the documentation and on the basis of article 15, paragraph 2 of the mentioned Regulation, we return the Report back for revision and addition, whereas the following should be considered:

1. On the Waters component:

1.1. 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:

- 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



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achieving a good one until 2021. Avoidance of the deterioration of the chemical condition and achieving a good one until 2027”.

- 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 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”.

- 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.

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.

In order to achieve the ecologic goals set out in the PMRB the following programmes 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:

- Programme 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.

- Programme 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.

- Programme 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



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with the underground waters and due to which the underground waters could be contaminated.

- Programme 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.

- Programme 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.

- Programme 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.

- Programme 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.

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.

1.2. 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.

1.3. In report 1, chapter 3 there are some technical inaccuracies in i.3.2.3 Hydrogeology, which need to be corrected.

1.4. 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 Southeastern 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.

1.5. The available data for 2009-2011 should be used on page 38.

1.6. Table 3.2.3.4-1 Average annual admissible concentrations of separate radionuclides in the groundwater radionuclides 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



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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 (DNHIW¹) no technogenic activity has been recorded. All results for ⁵⁴Mn, ⁶⁰Co, ¹³⁴Cs and ¹³⁷Cs 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.

1.7. 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.

1.8. 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.

2. On the Biological Diversity component:

2.1. Provide topical 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.

2.2. Correct the term error made in the text of Chapter 4, i. 4.1.1.11.

3. Radiation aspect of 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:

3.1. To present radionuclides emissions model for point sources at the Kozloduy NPP site.

3.2. 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.

3.3. 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.

3.4. 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.

3.5. Develop and implement a Programme for house radiation monitoring which should be part of the common Programme for radiation monitoring of the plant site.

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



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4. With regard to the analysis and assessment of the significance of the positive and negative effects over the individuals and the possible health risk from the construction and operation of the investment proposal made in the EIA Report:

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. 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:

- 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.

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.

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.

5. Other comments concerning the EIA Report:

5.1. The required evidence (specified in letter outg. № 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.

5.2. The EIA Report should contain topical data on the regulatory basis used and promulgation of the modifications and the amendments.

II. With regard to the Compatibility Assessment Report (CAR):

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, programmes, projects and investment proposals compatibility assessment with the subject of the goals of preservation of protected areas (Regulation on CA, prom. SG, issue 73/2007, mod. and am. SG, issue 94/2012)*, the following was ascertained:

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:

1. Projects related to the decommissioning activities of Kozloduy NPP Units 1-4 have been described in detail in the EIA 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.



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2. Information is missing in the EIA Report on the performed terrain studies: duration, time scale (field seasons), observation point coordinates.

3. In the part on the investment proposal impact assessment over 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".

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.

4. 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

5. 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.

In the "Proposals for measures" part only 2 measures have been proposed, one 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.

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.

In relation to all of the above and on the basis of article 24, paragraph 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 article 14, paragraph 8 of the EIA Regulation and article 24, paragraph 6 of the CA Regulation, the compatibility assessment report, under article 34, paragraph 1 of the latter regulation, is returned back for amendment and rework in line with the above comments.

On the basis of all of the above and on the basis of article 15, paragraph 3 of the EIA Regulation, we set the deadline of 30.04.2013 for the submission of an amended EIA Report to the MEW with attached reworked compatibility assessment report to it for a new quality assessment.

Attachment: MH notes over the EIA Report text.



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tel.: 940 62 19, Fax: (+3592) 988 53 16

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Sincerely yours,

EVDOKIYA MANEVA
DEPUTY MINISTER

Attachment

NOTES BY THE MINISTRY OF HEALTH CARE ON THE EIA REPORT TEXT

1. 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".

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.

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.

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.

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 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



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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 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".

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.

2. On Chapter 8 "Expert Conclusion"

Section 8.2 "Harmful physical factors"

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.

3. On Chapter 11 "Other information"

In Attachment № 10 "Disperse modeling of the spreading of contaminants: Maximum ground concentrations of the PMF at Kozloduy NPP (modeling)": results for the spread of the radioactive aerosol emissions have not been presented.

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.

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.).



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KOZLODUY MUNICIPALITY



Изх. № *73.00-126*
20.12.2012

Ref. Nr. 73 00-126
20.12.2012

TO
EXECUTIVE DIRECTOR
KOZLODUY NPP PLC

SUBJECT: Notification for investment proposal for construction of a "Facility for treatment and conditioning of radioactive wastes (RAW) with a high volume reduction factor (HVRF) in Kozloduy NPP Plc."

DEAR MR. NIKOLOV,

Kozloduy Municipality has received a notification for investment proposal for construction of a "Facility for treatment and conditioning of radioactive wastes (RAW) with a high volume reduction factor (HVRF) in Kozloduy NPP Plc."

Pursuant to the provisions of the Regulation on the terms and rules for performing an EIA, Kozloduy Municipality has provided for equal terms for the public access to the notification for investment proposal for construction of a "Facility for treatment and conditioning of radioactive wastes (RAW) with a high volume reduction factor (HVRF) in Kozloduy NPP Plc."

Please, be informed, that there are no opinions, statements and/or objections raised by the affected population within the statutory time frame.

RUMEN MANOEV
Mayor of Kozloduy Municipality



3320 Kozloduy, 13 Hristo Botev str., tel. 0973/85 800; fax 80 183
e-mail: obshtina.kozloduy@gmail.com



KOZLODUY MUNICIPALITY



Outg. № 73 00-31/1/
31.01.2013

**TO
THE SAFETY AND QUALITY DIRECTOR
OF KOZLODUY NPP PLC**

REFERENCE: Terms of Reference for determination of the scope and content of the EIA Report for the investment proposal for construction of a Facility for Treatment and Conditioning of Solid Radioactive Wastes with a High Volume Reduction Factor at Kozloduy NPP.

DEAR MR. DIRECTOR,

Approved revision 5 of the Terms of Reference for determination of the scope and content of the EIA Report for the investment proposal for construction of a Facility for Treatment and Conditioning of Solid Radioactive Wastes with a High Volume Reduction Factor at Kozloduy NPP was received at Kozloduy Municipality.

With the present letter I inform you that at the Municipality of Kozloduy the conditions for public access to the Terms of Reference have been provided. During the legitimate period there were no incoming views, statements and/or objections from the stakeholder population over the presented documentation.

The Municipality of Kozloduy accepts and approves the Terms of Reference for determination of the scope and content of the EIA Report for the investment proposal for construction of a Facility for Treatment and Conditioning of Solid Radioactive Wastes with a High Volume Reduction Factor at Kozloduy NPP.

RUMEN MANOEV, [sgd. ill]
Mayor of Kozloduy Municipality [seal]

3320 Kozloduy, 13 Hristo Botev Str., tel. 0973/85 800; fax 80 183
e-mail: obshtina.kozloduy@gmail.com



ЖЕНИТЕ В ЯДРЕНАТА ИНДУСТРИЯ

3321 Козлодуй, АЕЦ "Козлодуй", ПК - "Жените в ядрената индустрия - България"



изх. №: 005 / 15.03.13г.
Козлодуй

З-е К

ДО

ГОСПОДИН ПЛАМЕН ВАСИЛЕВ
ДИРЕКТОР ДИРЕКЦИЯ
„БЕЗОПАСНОСТ И КАЧЕСТВО“

ОТНОСНО: Инвестиционно предложение за изграждане на „Съоръжение за третиране и кондициониране на твърди радиоактивни отпадъци (РАО) с голям коефициент на намаляване на обема (ГКНО) в АЕЦ „Козлодуй“

УВАЖАЕМИ ГОСПОДИН ВАСИЛЕВ,

В отговор на Ваше писмо до Сдружение „Жените в ядрената индустрия – България“ (WIN-БЪЛГАРИЯ), относно инвестиционно предложение за изграждане на „Съоръжение за третиране и кондициониране на твърди радиоактивни отпадъци (РАО) с голям коефициент на намаляване на обема (ГКНО) в АЕЦ „Козлодуй“ Ви уведомяваме:

Наши специалисти се започнаха подробно с материала, който бе приложен и съгласно изискванията на Наредбата за условията и реда за извършване на ОВОС, считаме, че заданието за обхват и съдържание на ДОВОС е в съответствие с очакванията ни и ни удовлетворява. Нямаме коментари и забележки към представените ни документи.

С УВАЖЕНИЕ,

ПРЕДСЕДАТЕЛ НА
СДРУЖЕНИЕ „ЖЕНИТЕ В ЯДРЕНАТА ИНДУСТРИЯ-БЪЛГАРИЯ“:

РАДКА ИВАНОВА





АГЕНЦИЯ ЗА ЯДРЕНО РЕГУЛИРАНЕ

бул. Шипченски проход 69, 1574 София, Тел: (02) 94 06 800, Факс: (02) 94 06 919

№ 47200-41 / 21.03.2011 г.

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у.е.к.б
Р

ДО
Г-Н ПЛАМЕН ВАСИЛЕВ
ДИРЕКТОР "Б и К"
"АЕЦ КОЗЛОДУЙ" ЕАД

ОТНОСНО: Инвестиционно предложение за изграждане на "Съоръжение
за третиране и кондициониране на РАО с голям коефициент
на намаляване на обема в АЕЦ" Козлодуй"

УВАЖАЕМИ ГОСПОДИН ВАСИЛЕВ,

В отговор на Ваше писмо №395/13.03.2013 Ви уведомявам, че Агенцията за
ядрено регулиране (АЯР) няма допълнителни съображения и бележки във връзка със
заданието за определяне на обхвата и съдържанието на ОВОС на горепосоченото
инвестиционно предложение.

В рамките на своята компетентност в областта на безопасността на дейностите
и съоръженията за управление на РАО, АЯР извършва цялостен преглед на
техническия проект, респективно на междинния отчет за оценка на безопасността.
Прегледът е част от производството по одобряване на техническия проект на
ядреното съоръжение, провеждан по реда на Раздел III на Наредбата за реда за
издаване на лицензии и разрешения за безопасно използване на ядрената енергия.

ЗАМ. ПРЕДСЕДАТЕЛ:

БОРИСЛАВ СТАНИМИРОВ





БЪЛГАРСКОТО ЯДРЕНО ДРУЖЕСТВО
Бул. Цариградско шосе 72, София 1784
Тел.: 9795583, 9795565

ФР-18+9/1.04.2013

ДО
ГОСПОДИН ПЛАМЕН ВАСИЛЕВ
ДИРЕКТОР НА ДИРЕКЦИЯ „БЕЗОПАСНОСТ
и КАЧЕСТВО“
АЕЦ „КОЗЛОДУЙ“ ЕАД
3321 КОЗЛОДУЙ

Р-1 УК
20104.13

ОТНОСНО: обхват на „Задание за оценка на въздействието върху околната среда (ОВОС) на инвестиционното предложение за изграждане на съоръжение за третиране и кондициониране на твърди радиоактивни отпадъци (РАО) с голям коефициент на намаляване на обема (ГКНО) в АЕЦ „Козлодуй“

УВАЖАЕМИ ГОСПОДИН ВАСИЛЕВ,

Приложено Ви изпращам Становище за обхват на „Задание за оценка на въздействието върху околната среда (ОВОС) на инвестиционното предложение за изграждане на „Съоръжение за третиране и кондициониране на твърди радиоактивни отпадъци (РАО) с голям коефициент на намаляване на обема (ГКНО) в АЕЦ „Козлодуй“, изготвено от експерти на БЯД.

С УВАЖЕНИЕ:

ДОЦ. Д-Р ПАВЛИН ГРУДЕВ
ПРЕДСЕДАТЕЛ НА БЯД



София, 19.03.2013 г.



БЪЛГАРСКОТО ЯДРЕНО ДРУЖЕСТВО
Бул. Цариградско шосе 72, София 1784
Тел.: 9795583, 9795565

Изх. № 8.../19.03.2013

ДО
ГОСПОДИН ПЛАМЕН ВАСИЛЕВ
ДИРЕКТОР НА ДИРЕКЦИЯ
“БЕЗОПАСНОСТ И КАЧЕСТВО“
АЕЦ „КОЗЛОДУЙ“ ЕАД
3321 КОЗЛОДУЙ

СТАНОВИЩЕ НА БЪЛГАРСКО ЯДРЕНО ДРУЖЕСТВО

ОТНОСНО: обхват на „Задание за оценка на въздействието върху околната среда (ОВОС) на инвестиционното предложение за изграждане на съоръжение за третиране и кондициониране на твърди радиоактивни отпадъци (РАО) с голям коефициент на намаляване на обема (ГКНО) в АЕЦ “Козлодуй”

УВАЖАЕМИ ГОСПОДИН ВАСИЛЕВ,

Представения за становище материал относно обхват на „Задание за оценка на въздействието върху околната среда (ОВОС) на инвестиционното предложение за изграждане на съоръжение за третиране и кондициониране на твърди радиоактивни отпадъци (РАО) с голям коефициент на намаляване на обема (ГКНО) в АЕЦ “Козлодуй” е разработено на базата на действащото в страната законодателство, съгласно стандартите по безопасност на МААЕ, действащите Директиви на ЕС и в съответствие с добрите практики.

Заданието обхваща всички компоненти на околната среда и възможните аспекти на влияние, както и механизмите за контрол и ограничаване на вредните въздействия. Предвидено е изготвянето на подробно описание на основните характеристики на инвестиционното предложение, технологията на новото съоръжение за плазмено изгаряне на РАО, анализ на потенциалните въздействия върху околната среда и населението, както мерките за безопасност по време на изграждане и експлоатация на съоръжението.


Неоспорим е фактът, че радиоактивните отпадъци, които са натрупани в резултат на експлоатацията на АЕЦ „Козлодуй”, както и отпадъците, които предстои да

Неоспорим е фактът, че радиоактивните отпадъци, които са натрупани в резултат на експлоатацията на АЕЦ „Козлодуй“, както и отпадъците, които предстои да бъдат получени в резултат на дейностите по извеждане от експлоатация на ядрените реактори, трябва да бъдат безопасно и окончателно изолирани от околната среда чрез погребването им в хранилище за ниско и средноактивни радиоактивни отпадъци в съответствие с изискванията на българската нормативна база и стандартите за безопасност на Международната агенция за атомна енергия. Чрез предложеното от Вас съоръжение недвусмислено ще се осигури значително намаляване на обема и теглото на отпадъците, които ще се съхраняват в Националното хранилище за РАО, което се изгражда, а така също ще се осигури и значително намаляване на РАО, които се съхраняват временно на различни площадки на територията на АЕЦ „Козлодуй“.

Реализацията на инвестиционното предложение ще позволи на страната ни да изпълни поетите ангажименти по Единната конвенция за безопасност при управление на отработено гориво и за безопасност при управление на РАО, ще се намалят разходите за окончателното погребване на РАО и ще се гарантира осъществяването на непрекъснатия демонтаж при извеждането от експлоатация на блокове 1-4 на АЕЦ „Козлодуй“.

Българско ядрено дружество (БЯД) изказва подкрепата си за Вашето намерение и изразява становище, че изграждането на подобно съоръжение е крайно необходимо и гарантира безопасното управление на РАО. Надяваме се на неговата действителна реализация в предвидените срокове. Наред с положителните качества на инвестиционното предложение обаче, възникват някои въпроси относно недостатъчното познаване на технологията на новото съоръжение, които биха безпокоили най-вече жителите на най-близките населени места. Нашата препоръка в тази връзка е, на публичното обсъждане да се даде по-подробна информация относно опита в изграждането и експлоатацията на подобен тип съоръжения в световен мащаб с акцентира върху добрите практики в тази област, която в бъдеще ще се развива все повече във връзка с изтичането на експлоатационния живот на редица ядрени реактори в света.

Споделяйки мотивите си, изказваме още веднъж нашата подкрепа и Ви желаем успешна реализация на намеренията Ви.

Подготвил: 

Гл. ас. д-р. Цветана Нопова:

Председател на БЯД: 

Доц. д-р Павлина Прулева



София, 19.03.2013 г.

R E P U B L I C O F B U L G A R I A
MINISTRY OF ENVIRONMENT AND WATER
TO

MR. VALENTIN NIKOLOV
EXECUTIVE DIRECTOR OF
KOZLODUY NPP PLC
3321 KOZLODUY

Your Ref. № 3346/25.04.2013

COPY:

MINISTRY OF ECONOMICS, ENERGY AND TOURISM
ENVIRONMENT EXECUTIVE AGENCY / REGIONAL INSPECTORATE OF
ENVIRONMENT AND WATER - VRATSA
DANUBE REGION BASIN DIRECTORATE WITH CENTER PLEVEN
KOZLODUY MUNICIPALITY
MIZIYA MUNICIPALITY

Subject: 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

DEAR MR. NIKOLOV,

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:

I. As regards the the EIA Report (EIA-R).

Following the review of the documents submitted to us, in accordance with art. 14 paragraph 3 point 2 from *the Regulation for the conditions and the order for carrying out EIA* (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:

1. Section "Atmospheric air" - Chapter 11, Attachment 10 regarding the modelling of dispersion of atmospheric pollutants states as follows *"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."* At the same time only one option is presented, which related to 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 modelling.

The ground concentrations of fine dust particles (FDP) should be calculated. The complemented report calculates the ground concentration only of the total dust.

2. It should be known that the gravimetric deposition (Wg) is zero only for gases. The authors have used zero in the modelling 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 $W_g = 0.07 \text{ m/s}$.

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:

2.1. Some technical errors are noted in Report 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."

2.2. In Report 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".

3. The "Biologic diversity" component - in Chapter 3, item 3.10.2 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.

4. As regards the analysis and assessment of the significance of the positive and the negative impacts on the human and the potential health risk arising from the construction and the operation on the investment proposal, as developed in the EIA-R, MEW has received a statement from the Ministry of Health (MH), which states that:

The complemented EIA report takes into account the comments provided by the MH with letter outgoing № OVOS-277/13.12.2012 of MEW. The texts contained in Chapter 4 and Attachment 10, that are substantially reworked, provide sufficiently complete information as regards the radiation impact of the facility and the risk for the human health.

To achieve a greater precision and correctness of the report text, MH believes that it should be corrected and complemented, as follows:

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.

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).

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.**

II. As regards the Compatibility Assessment Report (CAR):

Pursuant to the criteria of art. 24 paragraph 3 from the *Regulation on terms and conditions for performing a compatibility assessment of plans, programmes, projects and investment proposals with the object and purposes of preservation of the protected areas* (The Regulation on CA, SG issued 73/2007, amended SG, issue 94/2012) an evaluation of the quality of the reworked CAR of the

investment proposal was made, and as a result thereof the following was established:

1. The Report is structured in accordance with the provisions of art. 23 paragraph 2 of the Regulation on the CA and the instruction provided by MEW.
2. The summary of the investment proposal, including its elements, is well presented in the report.
3. Update information is provided regarding the object and the purposes of preservation of the Natura 2000 network protected areas. The submitted report comprises an assessment of the degree of the impact of the investment proposal on the protected areas for preservation of the natural habitats and the wild flora and fauna BG0000533 "Kozloduy Islands", BG0000614 "Ogosta River", BG0000508 "Skat River", BG0000527 "Kozloduy", BG0000199 "Tsibar" and protected area BG0002009 "Zlatiyata" for preservation of the wild birds.
4. Up-to-date information is provided on the features of the other plans, programmes, and projects/investment proposals against which the cumulative impact assessment was made for the object of the CAR.
5. CAR contains part "Alternatives for decommissioning of the Plasma Melting Facility (PMF)".

With a view to the conclusions made in the CAR, the authors of the report recommend **to apply "immediate decommissioning" option** for the decommissioning of the PMF, which aims at diminishing potential negative impacts on the protected areas.

6. The anticipated direct and indirect impacts on the protected areas resulting from the implementation of the investment proposal are distinguished.
7. Measures are proposed for preventing and diminishing the harmful impacts.
8. The number and quality of the attached maps illustrates the situation on the terrain where it is foreseen to implement the investment proposal and its situation as regards the protected areas.

Taking into consideration the afore stated and on the grounds of art. 39 paragraph 8 from the Regulation on CA a **positive evaluation** is given according to the meaning of art. 24 paragraph 5, item 2 from the Regulation on CA for the quality of the CAR for investment proposal "Facility for Treatment and Conditioning of Radioactive Waste (RAW) with High Volume Reduction Factor (HVRF)" at Kozloduy NPP.

In relation to the above, we hereby inform you that pursuant to art. 39 paragraph 9 from the Regulation on CA, the CA Report should be covered during the public consultation of the EIAR report.

III. As regards the action to be taken by the Employer:

Based on the above mentioned and in pursuance of the requirements of art. 16 from the

Regulation on EIA, 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:

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 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.
3. Submit a copy of the **corrected** EIA Report and all attachments thereat to RIEW-Vratsa.
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, informing the population of the villages on the time and the location of the access provided to the EIA report and all its attachments.
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,

4 the date of the first meeting being 60 days from the date of the submission of the request. The written request should be accompanied by one copy of the **approved and corrected** EIA Report with all its attachments, for each of the above mentioned municipalities, which should either confirm the proposal in writing within 7 days after the request is submitted, or make another proposal for the same 60 days period. In case they do not express an opinion within 7 days it is considered that the Employer's proposal was accepted. In that relation, we recommend that you inform the mayors of the settlements within the 10 km zone around the site about the organization of the public consultation meetings for possible participation of all stakeholders.

6. The venue, date and hour of holding the meeting should be announced through the mass media or in another appropriate way, at least 30 days prior to the assigned date, with an announcement following the template provided in Attachment Nr. 3 of the Regulation on the EIA.

7. You should inform MEW in writing and to provide evidence on the implementation under item, item 4 and item 5, within 7 days after the completion.

In this connection, we draw your attention that pursuant to the provisions of art. 17 paragraph 1 item 4 from the EIA Regulation, the Employers, at his own discretion, could inform in writing also other specialists, authorities, and organizations for the public consultation meetings.

We hereby inform you that in accordance with the requirements of art. 25 paragraph 1 from the Regulation on CA, and art.16 paragraph 2 from the EIA Regulation, MEW will provide access to the CA Report through its internet site:

www.moew.government.bg/ключова тема Натрпа 2000.

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.

In accordance with the requirements of the Convention on EIA in a Transboundary Context, the EIA Report and its attachments, translated in to English language, shall be sent to Romania, as a country participating in the transboundary procedure for EIA of the investment proposal.

The above mentioned documents should be submitted to MEW as soon as possible, in order to comply with the regulatory terms and deadlines for organizing a public consultation on the EIA Report and its attachments on the Bulgarian territory, as well as pursuant to art. 25 item 7 from the Regulation on EIA, for providing a possibility for carrying out consultation in Romania, as a country impacted by the investment proposal.

In case Romania states its will to participate in the meeting/meetings for public consultations on the EIA Report on the territory of the Republic of Bulgaria, or for carrying out such meeting/meetings on its territory, MEW will inform you duly, to consider the date, venue, and hour of their organization.

Sincerely yours,

EVDOKIA MANEVA /sign.ill./
DEPUTY MINISTER