STANDPOINT of "Kozloduy NPP - New Build" Plc.

in compliance with Art.3 Item 8 of the Convention on Environmental Impact Assessment in a Transboundary Context (ESPOO Convention) on the proposals, recommendations, opinions and objections as a result of the publih hearings held on the

Environmental Impact Assessment Report (EIA-R) of the Investment Proposal:

CONSTRUCTION OF A NEW NUCLEAR UNIT OF THE LATEST GENERATION AT THE KOZLODUY NPP SITE

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1. QUESTIONS ANNEX No 1, according Romanian MECC Letter No 3035/AK/05.12.2014			
Public hearings, held on 18 November 2014, at 12:00 hrs, at the Cultural Centre, Unirii Street no.14, Dăbuleni, Dolj County, Romania			
1.	Violeta Ciuciuc, NGO Asociatia Dabuleni Impreuna pentru Viitor, Dabuleni	What is the cumulative impact on the component related to the human health and environmental hygiene and the risk for the Romanian population within the 30-km area?	In order to assess the cumulative impact, an analysis was carried out for the dose exposure of the population within the 30 km zone of the Kozloduy NPP of gas-aerosol and liquid radioactive discharges into the environment under all operating modes: of the existing facilities at the NPP site (Units 5 and 6, Spent Fuel Storage Facility and Dry Spent Fuel Storage Facility); the facilities of SERAW-Kozloduy and the future activities regarding: the decommissioning of units 1-4, including the Size Reduction and Decontamination Workshop (SRDW); the Plasma Melting Facility (PMF); the NDSRW – Radiana site and the NNU. According to the Report on the assessment of the impact on the environment of the NDSRW there is no release of radioactive material into the atmosphere and the discharged water under all operating modes. The assessment of risk to the population and the radioactive discharges include: - -assessment of individual and collective doses to the population; - -assessment of the radiobiological effects and the radiation risk. The assessment of external and internal exposure of the population in the area considers the following ways of impact: - -external exposure from radioactive cloud;

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			- -external exposure resulting from the deposition on the ground; - -internal exposure by inhalation; - -internal exposure from the consumption of radioactively contaminated food. The assessment of external and internal exposure of the population in the region of the NNU to liquid discharges takes into account the following ways of influence: - -during stay in the water of the Danube River – external exposure during swimming and travelling by boat; - -contact with coastal sediment of the Danube River – external exposure from bottom sediments and stay on the foreshore; - -ingestion of products (fish) from the water of the Danube River – internal exposure due to consumption of fish; - -during stay on the territory irrigated by water from the Danube River – external exposure.; - -ingestion of plant products irrigated with water from the Danube River (fruit, vegetables, etc.) – internal exposure; - -ingestion of meat and milk from animals that use drinking water from the Danube River – internal exposure; - -ingestion of meat and milk from animals using fodder, irrigated with water from the Danube – internal exposure; - -consumption of drinking water – internal exposure. The assessment of radiation risk is within the following range: - -Risk of radiation-induced cancer for the general population and for those in active employment age; - -Risk for hereditary diseases in the general population and for those in active employment age;

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			- -Risks and damage to certain tissues for the population in general; - -Risks of inherited diseases for the first generation and for the two following generations; - -Risks of inherited diseases of the reproductive part of the population evaluated for two generations under irradiation of the first generation before the second; - -Risks of inherited diseases of the reproductive part of the population, estimated for the first generation after exposure. In the cumulative impact analyses performed the provisions of the Regulation on the Basic Norms of Radiation Protection have been observed, where the limits for dose exposure of staff and population to sources of ionizing radiation have been determined. The Cumulative effect is described in detail in the EIA Report Chapter 5 Cumulative Effect and Chapter 11 Transboundary Impact.
2.	Badi Mariana, Local counsellor, Dabuleni City Hall	What is the primary circuit protective casing?	There is a difference between the different models of reactors. In some of them there is an internal leak-tight casing made of steel and outer casing made of reinforced concrete. The first leak tight casing made of steel is aimed at providing density for this volume, so, that in case of any incident discharge of radioactive substances in the environment is prevented, even in case of severe accident. The outer casing made of reinforced concrete is aimed at protecting the reactor building from external impacts, including airplane crash. As regards other reactor models the internal leak-tight casing (containment) is made of preliminary constructed reinforced concrete. The aim is in case of accident to avoid discharge of radioactive substances in the environment, even in the event of severe accident. The outer casing is also made of reinforced concrete and is aimed at protecting the reactor building from external effects, including airplane crash. Detailed description of the primary circuit protective casing for the

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			different reactor models is available in the EIA Report Chapter 2 – Alternatives.
3.	Marinela Miscu, Dabuleni Municipality	I would like you to tell me how many Storage Facilities (SF) for RAW exist and what is their impact on the Romanian population?	Information regarding the existing RAW Storage Facilities at the Kozloduy NPP site can be found in the EIA Report (Chapter 1, i.1.1.1.2.2). Two RAW temporary storage facilities have been individuated – a warehouse for conditioned RAW storage and a warehouse at the Lime Yard site. RAW is stored in these storage facilities in special casks which ensure their reliable isolation – there are no emissions to the environment. Due to this reason there is no impact, neither on the Bulgarian, nor on the Romanian population. RAW generated from all other facilities on the Kozloduy NPP site, including these from the New Nuclear Unit (NNU) have been assessed in Chapter 5 of the EIA-R. The results of their impact assessment are described in i.5.8.2. According to the conclusion in Chapter 5 – the combined impact of the RAW generated by all facilities at the Kozloduy NPP site, including these from the NNU is the following: there is no cumulative impact on environmental components – Atmospheric air, Surface water, Ground water, Soils. Biological diversity and thermal impact. Under the components Health and Hygiene Aspects and Radiation Risk the impact is negative cumulative of moderate and low significance. In all three proposed alternatives of technology, the impact of the RAW generated during operation and decommissioning of the NNU is assessed as limited only to the site boundaries and reversible.
4.	Crisitan Mihailescu, Insurance Company	What does the processing of RAW consist of which are a product of the Units 1-4 decommissioning activities?	The RAW generated in the process of decommissioning, according to their physical characteristics do not differ from the waste generated in operation; the amount of RAW generated in the process of decommissioning is envisaged in the construction of facilitates for RAW management so they are managed in the same way as the operational RAW and the processing consists of collection, sorting, radiological characterization, immobilising it in a cement matrix and packing it in reinforced concrete casks. A guarantee for the environment and population, their safety in particular, are the high requirements to the

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			cement matrix and the reinforced concrete casing performed. During the public hearing in Dabuleni technical information regarding the tests performed in terms of pressure and temperature in order to demonstrate that no mechanical damage is identified was provided; this is a guarantee for the lack of any danger to the population. All those tests are performed under the strict supervision of the Bulgarian Nuclear Regulatory Agency (BNRA) inspectors. The Radioactive Waste management is presented in Chapter 11, i.11.3.8 of the EIA-R.
5.	Crisitan Mihailescu, Insurance Company	What is the reason to construct this NPP unit in Kozloduy and not in any other part of Bulgaria?	The EIA procedure in transboundary context is regulated by different legislative bases. At the international level the ESPOO Convention is observed. Apart of that, Directive 2011/92/EU on the EIA is in force and it is aimed at harmonising the legislative framework on EIA of the EU member states. The EIA Directive, as well as the ESPOO Convention, contain series of conditions as regards the contents of the EIA Reports. One of these is a description, where possible, of reasonable alternatives (for instance of geographical or technological nature) of the proposed activities. The EIA Report (Chapter 2, i. 2.1-2.4) describes the alternatives under consideration in relation to the location (Chapter 2, i. 2.1), the alternatives considered for the adjacent infrastructure during the phases of construction and operation (Chapter 2, i. 2.2.), alternative options for the construction of a new nuclear unit (Chapter 2, i. 2.3) and the “zero” alternative (Chapter 2, .i 2.4). In the context of what is mentioned above, four alternative options/sites were reviewed for the location of the NNU. Chapter 2.1 of the EIA Report considers the differences between the four reviewed alternatives for sites, located at the territory or in close proximity to the existing Kozloduy NPP. This is justified by the fact that the logic of the implementation of the investment proposal is for the successful utilisation of the whole Kozloduy NPP capacity, including the available infrastructure and the experiences highly qualified personnel. In addition, during the initial site selection for the construction of the

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			nuclear power plant in the mid-1960s two general conditions were met: - the site had to be located in an area with the calmest possible tectonic and seismic conditions and to provide stable soil base; - in close proximity to the site there had to be a large water basin or river, since in order for the power plant to operate it was necessary to have a large amount of water. The site selection was assigned to the Research Directorate of ENERGORPOEKT with the help of the Geology Institute and other institutes of the Bulgarian Academy of Sciences (BAS), as well as Russian consultants. In the course of this selection the fact that the territory of Bulgaria consists of two different parts in tectonic terms was taken into account. Southern Bulgaria falls within the Alpine-Himalayan orogeny, in which the mountain ranges formation processes have continued until few million years ago. In this part of the country the selection conditions are more difficult due to the high seismicity and the absence of large water sources. In Northern Bulgaria, which is part of the Moesian platform the site selection conditions are far better due to the calm tectonic conditions and the presence of large water sources. The site selection was performed by analysing the whole territory of the country whereas the conditions of all possible locations had been reviewed. On this basis 12 alternative sites were determined. After review of the geologic and hydrologic information for them, the sites in Southern Bulgaria and on the Black Sea Coast were left out, whereas only several sites close to the Danube River remained. The more detailed analysis of the Danube River Coast indicated that the region of Kozloduy is the most suitable for the construction of the NPP due to the following reasons: - the area is located in the calmest part of the Moesian Platform where the tectonic folding processes and the formation of big faults have ended approximately 200 million years ago and active faults have not been found and the seismicity is one of the lowest in Bulgaria; - the site is located in the non-floodable terrace of the Danube River

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			and good geo-morphologic conditions exist for the construction of water supply channels; - the soil base is constructed of terrace sediments covered with loess with a thickness of 10-12 m, which can be removed or improved by different technical means and equipment; - there are no landslides, karst, river erosion or high level of ground water existent, nor other processes of geological hazard. The fourty years of trouble-free operation of the power plant without any engineering geologic and hydrogeology problems is the most significant proof for the rightness of its choice. In this line of thought, the consideration of alternative sites at or in close proximity to the territory of the existing nuclear power plant is completely justified. Due to these reasons in their Decision (Record № 14 dated 11 April 2013), the Council of Ministers of the Republic of Bulgaria determined that the construction of a new nuclear unit be performed at or in close proximity to Kozloduy NPP.
6.	Cioraia Virgil, Dabuleni Municipality	1. What happens to the RAW generated from the main NPP operational activities? 2. Where is the RAW located which is a result of the decommissioning activities of Units 1-4?	As mentioned before, in response to question 4, the RAW is collected, sorted, characterised radiologically and all these data are marked on the passports of the packaging. Every single package has a unique number and the RAW is stored in the Interim Storage Facility which is currently a facility with a multi-barrier protection and a capacity of 1920 packages and in the following 3-4 years the construction of National Disposal Facility (NDF) is envisaged. This concerns both the RAW generated from the decommissioning of Units 1-4 and the operational RAW from Units 5 and 6. The NDF is intended for the burial of conditioned and packed low- and medium-level short-lived radioactive waste which are a result of the KNPP operation, decommissioning of nuclear power reactors and of the conventional sources – medicine, scientific research, technical applications, etc. (Chapter 1, i.1.1.1.5 of the EIA Report). The NDF also needs to ensure: (Chapter 3 – i.3.7 of the EIA Report) - The capacity for burial of all accumulated low- and medium-level radioactive waste generated in the country and stored at

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			the locatons of their origin and in the facilities for radioactive waste management of SERAW; - The capacity for burial of all RAW which is expected to be generated until 2075
7.	Violeta Ciuciuc, NGO Asociatia Dabuleni Impreuna pentru Viitor, Dabuleni	What is the impact from the current operation of the NPP on the agricultural bioproducts in terms of radioactivity?	The radioecological monitoring performed by "Kozloduy NPP" Plc. covers all environmental components – air, water, topsoil, vegetation, crops, typical foods produced in the area, etc. European requirements for the application of Article 35 of the Euratom Treaty for monitoring levels of radioactivity in the environment for the assessment of radiation exposure of the population as a whole are regulated by the European Commission Recommendation 2000/473/Euratom, 08.06.2000. This recommendation is essential for standardization and unification of the applied practices of radioecological monitoring in EU member states. It defines the concepts and general requirements regarding the types of monitoring, monitoring networks and sampling (dense and diluted), frequency of testing, volume of monitoring and requirements for sampling and analysis of the main controlled objects of the environment. Regulated are also the volume of the supporting information to the sample, the management and communication of monitoring data. The institutional radiation monitoring of the environment is governed by the long-term environmental radiation monitoring programme of "Kozloduy NPP" Plc. The program is based on the legal requirements in this sector, as well as on international best practice and the operational experience of the Radiation Monitoring Department. The program is coordinated by the Ministry of Environment and Water (MEW), the Ministry of Health (MH) and the Nuclear Regulatory Agency (NRA) and is in line with international recommendations in the field, namely Article 35 of the Euratom Treaty and Recommendation 2000/473/EURATOM. To ensure independent control, radiation monitoring programmes are implemented by the control authorities of the EEA/MEW and NCRRP/MH. The long-year study of the agricultural products shows that they are not

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			contaminated with radionuclides from the NPP. The results for the human-induced activity are very low. They are below the detectable level of the respective equipment which has very high sensitivity. The radioactivity of this flora is formed completely by the natural radioactivity. Over 90% of it is due to the K-40 isotope which is located everywhere, including in our bodies. Therefore, one cannot speak of radioactivity in the agricultural produce caused by the Kozloduy NPP operation. Implementation of the radiation monitoring program has been verified by selfassessment criteria – fulfillment of the pre-set volume, with guaranteed reproducibility and accuracy of results. The accuracy of the analyses is verified repeatedly in national and international prestigious laboratory comparisons of the World Health Organisation (WHO), the Federal Office for Radiation Protection of Germany (BfS), the International Atomic Energy Agency (IAEA) and the National Physical Laboratory in the UK (NPL). The results of the institutional radiation monitoring are verified annually by independent research of MEW and NCRRP (MH). The main findings are available for the general public. This is described in detail in the EIA-R Chapter 9, i.9.2. Radiation Monitoring.
8.	Violeta Ciuciuc, NGO Asociatia Dabuleni Impreuna pentru Viitor, Dabuleni	Only positive impact was presented; what is the negative impact? Is there any such thing from the construction of the new nuclear unit?	The EIA procedure is the main preventive tool which guarantees that the impact of the **investment proposal** on the environment is analysed and assessed at the earliest possible stage. It is part of the licensing process for the construction of a new nuclear unit which is set out in the Safe Use of Nuclear Energy Act (SUNEA), whereas the goal is to design, construct and operate such a facility which would have minimal impact on the environment and the public. The impact assessment for the environemtnal components and factors made in the EIA Report is indicated in the matrix for the assessment of the potential impact during the implementation of the investment proposal (Chapter 4, Table 4.13-1), whereas for the selected site in i.4.14 “Justification of the selected alternative” there is the complete assessment of the level of impact of the investment proposal provided.

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			There is an indentified, albeit low, negative impact with the low increase of the temperature of the Danube River due to the Hot Channel. This may cause indirect negative impact, but it won't be such that would endanger the biological diversity in the eco-system. The cumulative impact on the conventional discharge water, i.e. these are the waste waters from the life cycle of the people working in the NPP mainly which, accumulated for all the facilities for which the cumulative effect is calculated, introduces a negligibly low negative load compared to the large quantity of the Danube River. All these waters currently go through and will continue to go through purifying stations – this is a negative impact, but it is reversible. Long-lasting impact is also identified on the soil during the construction of the NNU, whereas during the recultivation of the field after decommissioning the soil is going to be remediated to its original state.
9.	Lucian Stirb, NGO Terra Millenium III	Are there any simulation models for potential risks to the environment in case of accident?	Every nuclear vendor declares that the relevant safety analyses have been performed, the so called Probabilistic Safety Analysis Level 1 and 2 which have determined the probability for nuclear accident. As per the Bulgarian legislation and the IAEA Regulations, 1. the probability of core accident should be lower than 1 of 100,000. The models under consideration meet this condition with at least one order. 2. As regards the radioactive discharges in the environment, the Bulgarian legislation and the IAEA regulations determine that the frequency should be lower than 1 instance for enery 1,000,000 individuals. The reactors under review meet these criteria with at least one order. The analysis of the reviewed and evaluated reactor models meets these conditions. In the Safety Analysis Report the requirements are as per the Bulgarian and IAEA Regulations. The conditions have been determined for normal operation and for deviation from normal operation and the occurrence of events which might occur in the range of 10^{-2} to 10^{-6}. Core melt down scenarios have been reviewed as well. There is a technical

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			solution devised for retaining the core melt. In some models this is done through specially designed core-catcher. Other reactors differ in terms of the respective design solutions, which provide reactor cooling from the outside in order to avoid its meltdown. In the EIA-R Chapter 6 an environmental risk assessment has been performed via modelling both for design basis accident and severe accidents related to significan nuclear fuel damage. For the purposes of the simulative calculations the nuclide vector of the source is conservatively determined (quality and quantity of the radioactivity which is to be discharged into the environment) and the ways for spreading and impact of the radioactive substances in the environment. The meteorological conditions are selected in such a way so that the modelled option would have the worst radiological results. In the calculation of the absorbed dose by the individuals for a period of one year and more, the internal iradiation as a consequence of the consumption of contaminated food products and water has also been considered. The results of the analyses indicate an acceptance of the environmental risks. In brief, these analyses are presented in the EIA-R Chapter 11, i.11.3.3.
10.	Epure Gheorghe, Dabuleni Municipality	With the permission of the Bulgarian participant, a short question: what was the reason to decommission Reactors 1-4? I am thinking about this: old technology, expired life-time, or existing nuclear accident possibility?	Unit 1 and 2 are VVER-440/230 model, whereas Units 3 and 4 are the second stage of KNPP and despite being the same model, they are a modernised version with a three-channel emergency protection system. Units 1 and 2 were shut down at the end of 2002 after Bulgaria was invited to negotiate EU accession and Units 3 and 4 were shut down at the end of 2006 in the eve of Bulgaria and Romania's accession to the EU. The decision is purely political and there are no technological reasons for the shutdown of Units 3 and 4. Significant modernisation was performed on Units 3 and 4; on the one hand it was aimed at increasing safety and on the other to demonstrate high safety level compared to same generation reactors. Just part of the modernisation which is now implemented in all nuclear power plants: a system for severe accidents management on Units 3 and 4 was implemented which is only now being introduced in some power plants. This was confirmed by the many reviews, such as the IAEA mission which reviewed the functionality of

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			the NPP; other reviews include WANO and a review by the European Commission. All three reviews found no problems which cannot be solved at the power plant. The conclusions were that KNPP Units 3 and 4 meet the safety requirements and they are comparable to units from the same generation.
11.	Violeta Ciuciuc, NGO Asociatia Dabuleni Impreuna pentru Viitor, Dabuleni	How do you envisage hiring Romanian workers when they don't speak your language?	When the KNPP nuclear units were in construction and Bulgaria did not have well prepared qualified builders for which reason hundreds of workers from Vietnam, Poland, Cuba, and other countries were hired. The language barrier was not an issue and was overcome. The expectations are that during the construction stage there would be need of welders and other qualified workers. The selection of a Constructor for the implementation of the investment intention shall be subject to a special procedure. The candidates would have to meet certain criteria. Thus, among all of the applicants the main Contractor for the Works shall be selected. It is a normal practice for the main contractor to hire subcontractors for the implementation of certain tasks. The coordination between the managers would most probably be done in English language, but within the organisation of the subcontractor(s) the communication may be performed in a different language. This is a common practice in the implementation of large-scale projects nowadays. As was already mentioned during the Public Hearings, in the process of construction of Units 5 and 6 of the power plant there were builders from several countries and the language barrier was not a problem.
12.	Albena Simeonova, Anti Nuclear Coalition	There is a huge interest to this project, but among the questions, there is a statement. Mrs Albena Simeonova from "Anti-nuclear" Coalition requested to make a statement (see table above). With regards to bio-produce, she considered the ecologist from the NPP did not understand the question very well. There are two types of agricultural produce –conventional and one certified bio-produce. Thanks to the landscape of Dolj region the certified bio-producers in	Despite the fact that in this statement there were no questions asked, we believe that we need to make certain clarifications, since the delivered information is incorrect and it is not substantiated with actual data. In her statement Ms Simeonova commented on the following: 1. Impossibility for production of bio-produce within the 30-km area around NPP; 2. Dissent, that the expected radiation impact would only be

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		Dolj are more than all the producers in Bulgaria. Mrs Simeonova is a Bulgarian bio-producer from Nikopol municipality. First question of the certifying organisation was whether she was located in a proximity to 10 and 30 km area of nuclear power plant. 1. According to her the agricultural producers in the 30-km area around the NPP would have problems and she quoted parts of the conclusions made in the EIA Report.	limited to the site; 3. Burial of the spent nuclear fuel (SNF) as radioactive waste (RAW) would destroy the territory of the Republic of Bulgaria for billions of years; 4. Referendum for the construction of NNU and RAW Storage Facility; 5. Admissible thresholds for the gas aerosol discharges from the ventilation stacks of the NPP; 6. The SNF at the site is a problem in the long-run since it transfers the responsibility to future generations. **As regards the abovementioned, we want to make the following clarifications:** 1. The verification made with the regulations at the national level indiacated tha the rules for biological production are governed by the Act on Application of the General Arrangements on the Agricultural Produce Markets of the European Union (ЗПООПЗПЕС) and Ordinance № 1 dated 7 February 2013 for the application of the rules for biological produce of plants, animals and aquacultures, vegetable and animal products, aquaculture products and foods, their labeling and the control over the production and labeling process. From this verification the following was ascertained: there is no requirement for a certain distance away from a nuclear power plant in order to be certified for producer of bio-products. In confirmation to what has been said is the fact mentioned by Ms. Simeonova herself that to the present moment biologically certified farms also exist in the 30km and 100km area around Kozloduy NPP. It is evident that the existence of the nuclear power plant was not an issue for their certification. In addition to that, every certifying authority requires the presence of certain data and proof within the certification process which have obviously been provided and confirmed the compliance

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			with the requirement for the lack of pollution both of the soils and air;
		2. In the data for all the impact of the cumulative effect of generated radioactive discharges of all operating units in the atmosphere and in the Danube River, along with the SNF buried somewhere in the territory of Bulgaria we should not accept the conclusion on p.53 and the Impact Assessment, where it is stated that the expected radioactive impact would only be limited to the site of the unit and based on the conclusion of the disturbing parameters mentioned by the authors of the report for the RAW generated in the operation of the site.	2. On p.53 of the EIA Report no such statement is found. The conclusions of the authors of the EIA Report are only partially quoted, whereas obviously truly intentionally several bullet points were missed (see i.4.7.2.4 from the EIA Report).
		3. She quoted the authors' conclusions: "probability of existing of the event – expected"; "type of impact – negative, direct, primary"; "characteristics of the impact – radiation"; "duration – long-term"; "cumulative – yes".	3. As per the Bulgarian REGULATION on the conditions and order for implementing the environmental impact assessment, dated 2006 (Reguation on EIA), Art. 14 (1), i.4 assessment of the significance of the impacts includes their description as direct or indirect; cumulative; short-term, mid-term and long-term; permanent and temporary; positive and negative; local, transboundary, etc. impacts on man and environment due to the construction and operation of the Investment Proposal. The identified potential impacts are described in Table 4.13-1 of Chapter 4 where all assessments have been underlined, which means that these are lements from which no impact is expected or elements from which negligible negative impact is expect due to the implementation of the Investment Proposal.
		4. Based on the conclusions of the EIA authors, it should be underlined to the Bulgarian and Romanian public that there are no limits for radioactive discharges from the ventilation stacks of the nuclear units, what is more the Danube River cannot be leak-tightly isolated.	4. This is Ms. Simeonova' personal stand. Both the National and international legislation envisage such admissible levels of the discharges through the ventilation stacks. These levels are scientifically justified. The actual discharges both from the Kozloduy NPP and the NNU are much lower that these admissible levels. The risk to the human health from these

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			discharges is analysed in detail and assessed in Chapters 4 and 5 of the EIA report.
		5. Whereas at the same time the burial of SNF as RAW would destroy the territory of Bulgaria for billions of years.	5. Ms. Simeonova makes no difference between spent nuclear fuel SNF) and radioactive waste (RAW). SNF is considered a strategic raw material and it is not buried anywhere else in the world, let alone at the site of Kozloduy NPP. In the SNF and RAW Management Strategy until 2030 the SNF Management shall be developed in the following directions: - Spent nuclear fuel generated at the territory of the country is a material containing useful components. This material should be processed in the country of origin or at an international level under mutually beneficial economic, technologic and ecologic manner; - Spent nuclear fuel whose processing is proved to be economically inexpedient is determined to be radioactive waste under the terms of the SUNEA and can be managed under the concept of "deferred solution for further use" under the condition that it should be stored with the possibility for its extraction; - During the long-term storage with the option of "deferred solution" the SNF should be stored by use of the dry spent nuclear fuel storage technology; - In the long-run, considering the global and general European consensus for deep geologic storage facility it is accepted that this is the most appropriate option for lasting guarantee of safety with the isolation of high-radioactive and long-lived radioactive waste; - Considering the geologic and climatic conditions of the country, the legislation, the public attitude, the financial possibilities and the volume of high-level radioactive waste, incl. HLSIR, it is accepted as expedient for the country to

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			participate in projects at regional and international initiatives. It should be taken into account that the search for international solutions should not endanger the current national programme. For the SNF management for the existing facilities and the NNU envisaged for construction a strategy of open cycle is adopted with long-term storage with the use of dry storage.
		6. According to Mrs Simeonova, Kozloduy held a referendum whether the population wanted an NPP and the population, with certain deviation, stated yes; when asked if they want a nuclear depository, more than 95% of the population sayd "no".	6. The local referendum held in 2007 in Kozloduy and the national referendum in 2013 did not achieved the goals foreseen by law due to the low turnout. After the public did not take advantage of the possibility foreseen by the law for expressing their position, the decision were taken by the Council of Ministers of the Republic of Bulgaria.
		7. She stated that in March 2013 the mayor of Kozloduy Rumen Manoev issued a statement asking to define monthly and yearly acceptable thresholds for aerosol emissions from the ventilation stacks for radioactive noble gases, aerosols, iodine 131 and gases, but according to her there may not be acceptable thresholds for radioactive substances, as each such particle is lethal for the human organism.	7. As regards the requirements for determining discharge limits, Ms Simeonova quoted a letter by the mayor of Kozloduy Mr Manoev. Mr. Manoev issued questions and requirements during the consultations for the preparation of the Terms of Reference for the scope and content of the EIA Report. This has been taken into account and addressed in the EIA Report.
		8. As for negative impacts, she stated that in Chapter 1 of the EIA-R, it says – the existence of such quantity of processed nuclear fuel at the site of KNPP represents a serious problem in the long-term, as this is a deferred solution that transfers responsibility to the future generations. Depending on the orientation of the government it is decided whether the power plant to be constructed should be Russian or American. Nevertheless, it is equally harmful for the health of the human and for the generations for millions of years.	8. In line with SNF and RAW Management Strategy until 2030, the SNF is considered a raw material which might bring benefits to the country in the future. The SNF **IS NOT** a radioactive waste. The exact quotation from Chapter 1 is the following: "The processing of SNF is seen as a necessary process providing for separation of released FP and at the same time storage and possibility for using the energy resource of the fission materials which are property of Kozloduy NPP. The main advantage of this alternative is the clearing of the Kozloduy NPP site from SNF using finances allocated in equal portions for a long period

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			of time. Thus the principle of not encumbering the future generations is satisfied. In conclusion we can say that **this statement is full of unjustified claims, which have not been substantiated by any data, and the extracts quoted from the EIA Report are taken out of the context of the whole exposé**.
13	Sandu Florin Tudor, NGO Terra Millennium III	What is happening in case of flood? Is there a safety plan?	As per the Bulgarian legislation, the operator of the nuclear facility is obliged to develop an Internal Emergency Plan with which measures for mitigation and elimination of the consequences of the accident are defined and emergency preparedness is created and maintained. The Internal Emergency Plan is based on the maximum possible radiation consequences for the staff, the public and the environment in the event of an accident and it determines the mitigation measures and the measures for elimination of the accident consequences, the functional responsibilities of the personnel for actions in case of emergency situation, as well as the interaction with the bodies of the Executive authority in line with the external emergency plan. The Kozloduy NPP Emergency Plan is developed by considering all of the provisions of the Bulgarian rules and regulations, whereas it covers a wide range of events without view of the probability of their occurrence. Such events are included here as for instance emergency situations as a result of both external and internal events, including fire, earthquakes, aircraft crash, compromised security, explosions, floods, hurricanes and other natural disasters which might lead to dangerous states of the power plant. During the conduct of the stress-tests in 2011 after the Fukushima accident and the analyses made at KNPP, it was proved that the KNPP site is non-floodable even in case of events resulting from the combination of exteme meteorological phenomena. Despite these analyses, KNPP maintains full emergency preparedness for actions in case of possible floods at the site. In addition, there are mobile diesel-generators provided which can be used should the need arise.

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14	Sandu Florin Tudor, NGO Terra Millennium III	Question related to the Plasma Melting Facility (PMF) – is it foreseen to be constructed with some filters and what is the safety of the filters?	The facility is currently under construction and owned by the State Enterprise "RAW" (SERAW). The PMF currently has approval of the Technical Design by the BNRA. The filtering system of the installation is a combination of 5 (five) different technologies for purification of flue gas. These are as follows: 1. Secondary chamber for further incineration of soot or other fly-ash in the flue gas. Here there is 100% redundancy (back-up) of the torches: one is in operation, the other is in back-up. 2. Mechanical purification of flue gas, equipped with self-clean-up system. 3. Scrubber for chemical purification of flue gas. 4. Highly effective HEPA filters for purification of aerosols. 5. Chemical system for purification of flue gas from nitrogen oxides. The filter group of the Plasma Melting Facility (PMF) consists of: • ***Mechanical filter*** intended for mechanical capturing of the fine particulate matter which is transferred from the furnace chamber with the flue gas. This filter is not subject to change within the yearly operational campaign of the installation (4000 hours). It is self-purifying via vibrating (shaking) mechanisms and periodic pneumatic blowdowns. The separated fine particulate matter is collected in the lower part of the filter in a barrel, which is leak-tightly attached to the filter. • ***Scrubber***, which via chemical reaction releases the chlorides, sulphates (R SO4) and sulphites (R SO3) contained in the flue gas (NaOH), is maintained via measurement of the pH of the medium and adding of NaOH via circulation pumps. The pumps are two, whereas one of them is in operational mode and the other one is redundant. This filter is not subject to change within the frames of the inter-outage period of 4000 hours. • ***HEPA filter*** (high efficient pressure air filter) – this filter is

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			intended for capturing the aerosols potentially contained in the flue gas. Two parallel filters are installed on the route of the flue gas, whereas one of them is in operation and the other one is redundant.
15.	Sandu Florin Tudor, NGO Terra Millennium III	Efficiency of filters is of interest to me. What is it?	During the Factory Acceptance Tests the filter group equipment achieved purification of the flue gas of 99, 9999%, which exceeds the percentage set out in the Technical Design of 99, 997 %. Such filtering system has already been manufactured and is currently stored at the site of Kozloduy NPP. The system has been manufactured by a Dutch company. This percentage of purification has been achieved via combination of mechanical, wet and highly-effective aerosol purification filters and in combination with the low emissions due to the complete incineration, it is possible to reach even 100% efficiency.
16.	Sandu Florin Tudor, NGO Terra Millennium III	Question regarding the Hot Channel (HC): how many monitoring points exist on this channel? I am speaking of monitoring of all types.	As regards the Monitoring of the Hot Channel (HC): the discharges in the HC are monitored at the point of discharge. The liquid discharges are collected at the so called control tanks. When such a tank with a volume of 50 cubic meters is filled, special pumps are actuated to homogenise the water inside, then a sample is taken. This sample is analysed for the content of radioactive substances. If the radioactivity is above certain control level (CL)„ this water is not discharged and is redirected for additional purification. If the content is under certain control level then permission for discharge is obtained and the tank is drained, whereas during the drain there is constant sampling and the drained water is monitored for radioactivity. If the radioactivity is higher than certain CL and certain value, the draining is automatically ceased. These drains are performed by the so called Auxiliary Buildings (AB)– 3-off on the territory of KNPP; 1 for Units 1 and 2, 1 for Units 3 and 4 and 1 for Units 5 and 6. At each of these AB there is such a facility for on-line monitoring. This is the so called mandatory monitoring. What is more after the draining points of the 3 ABs, there is one more monitoring point which samples directly from the HC and monitors the radioactivity of the water in the HC. This is the monitoring at the KNPP site; from radioecological point of

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			view, we have automated sampling downstream in 2 additional points (including Oryahovo port, a routine monitoring) and 1 at the point of discharge of the HC in the Danube River. This comes to show the attention we pay to the radiation monitoring of the Danube River, and that the operation of KNPP does not cause any impact.. The Monitoring is described in Chapter 9 of the EIA Report.
17.	Mario Milov	Reply to Simeonova in order to clarify the position of the Kozloduy Municipality Mayor. Mr. Manoev and the Municipality completely support the CNNU at the Kozloduy NPP site, of course while pursuing all standards environmental and international.	This is not a question, but a reply to Ms Simeonova's statement clarifying the postivie position of the Mayor of Kozloduy as regards the implementation of the project for the construction of a NNU.
Public hearings, held on 19 November 2014, at 12:00 hrs, at City Hall meeting room Craiova, AI Cuza Street, no. 7, Craiova, Dolj County, Romania			
1.	Marcel Radut, Pro Democratia Association, Craiova	1. Is it true that there have been 3 incidents/problems in the operations of KNPP in the period 2011-2013?	1. Reporting of the incidents which occurred at Kozloduy NPP is regulatory defined and based on the provisions of the *Regulation on the conditions and order for notifying the Bulgarian Nuclear Regulatory Agency for events which have occurred in nuclear facilities and units with sources of ionizing radiation.* Within this Regulation categories of events have been defined in terms of their importance to safety (deviations ("anomalies") of normal operation, incidents and accidents), the order, terms and means of notification. The form for notification is also defined, as well as the requirements to the contents and the provided information. The main goals are to determine the relevance to safety (what might happen), the violated regulatory requirements and the consequences for radiation protection. As per the regulation the importance of the event with regard to safety and radiation protection is defined under the INES scale of the IAEA, initially by the licensee, whereas the final evaluation as per the same scale is determined by the chairperson of the BNRA. The international scale for nuclear and radiological events, developed by the IAEA, is used for duly and agreed notification of the public as regards to the significance for safety of events related

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			to sources of ionizing radiation. For the correct classification of events under the INES scale the IEAE has developed Guidelines in which strictly defined assessment criteria are used which are related to defining the significance of the events from the point of view of safety. The events are thus classified according to a seven-level scale: - Levels 4-7 are called "accidents" - Levels 1-3 are called "incidents". The events related to safety, but with no significance to safety are classified as "Below Scale / Level 0" (No Safety Significance). Events with no significance to safety, with regard to radiation protection and nuclear safety, are not classified under the scale. The events are reviewed in line with the criteria as described in the Guide in respect of their impact on three different areas: - Impact on the population and environment; - Impact on the radiation barriers and controls of the facilities; - Impact on the deep-echeloned protection. The events, classified on the basis of the two criteria - Impact on the population and environment and impact on the radiation barriers and controls – have been described as events with "real consequences" on the public, environment and facilities: Levels 4 to 7 refer to higher levels of real consequences on the public, environment and facilities. Weakening of the deep-echeloned protection as a whole includes events without real consequences in such instances when measures envisaged for protection of accidents have not been activated as intended: - Level 1 only includes violation of the deep-echeloned protection;

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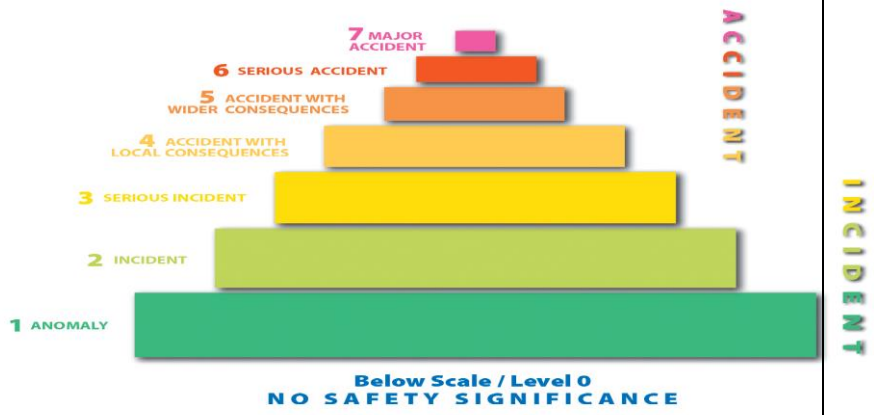
		2. The question was incidents and/or problems:	- Levels 2 and 3 comprise more serious violation of the deep-echeloned protection or lower levels of real consequences for the people and facilities at NPP.  The User Manual INES International Scale for Nuclear and Radiological Events", ed. 2008, IAEA, is available at the website of the BNRA with the following link: http://www.bnra.bg/en/nuclear-facilitie/kozloduy/unit4/nuclear-facilitie/npp-events/. 2. In the period between 2011 and 2014 there **are no** events classified under the INES scale with Level 1 or higher. In the same period Kozloduy NPP reported events classified as **Level 0 / Below Scale** under the INES scale. These events are defined as events with no safety significance. Their distribution in the years is as follows:

<table>
<tr><th>No</th><th>Name / Organization</th><th>Written or verbal suggestions, recommendations, opinions and objections
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<tr><td></td><td></td><td>Mr Radut replied: We are also not willing to discuss other issues, but the presentations of the Bulgarian side claimed that it has wide experience since 1975 and we would like to understand how this experience will be applied in the future and how you would implement best practices. Additionally, only one of the questions was related to events of the past, all others are related to the current moment. I wanted to receive statistical data and facts that would convince us that this experience can truly be used beneficially.</td><td>
<table>
<tr><th>Year</th><th>2011</th><th>2012</th><th>2013</th><th>2014
Till 08.12. 2014</th></tr>
<tr><td>Events at Units 5 and 6</td><td>6</td><td>12</td><td>12</td><td>2</td></tr>
<tr><td>Events at Units 1-4</td><td>1</td><td>1</td><td>-</td><td>-</td></tr>
<tr><td>Common Plant Facilities</td><td>0</td><td>0</td><td>1</td><td>0</td></tr>
<tr><td>Total number of events reported to the BNRA</td><td>7</td><td>13</td><td>13</td><td>2</td></tr>
</table>

All these reported events are non-safety significant and do not have consequences for the personnel and the environment.

In addition we provide you with an electronic copy of the Sixth National Report of the Republic of Bulgaria under the Nuclear Safety Convention, as well as the Annual Report of the BNRA for 2011, 2012 and 2013 and description of the events reported to the BNRA for 2011, 2012, 2013 and 2014 in Bulgarian and English language.</td></tr>
<tr><td>2.</td><td>Marcel Radut, Pro Democratia Association, Craiova</td><td>Is it true that the NPP is located in a seismic zone and can be affected by earthquake with epicenter in Vrancea?</td><td>Kozloduy NPP is located in the least seismic (also known as aseismic) area of Southeast Europe. The figure below indicated the historical seismic activity due to earthquakes and it can be seen that there were no earthquakes in close proximity to the nuclear power plant.</td></tr>
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			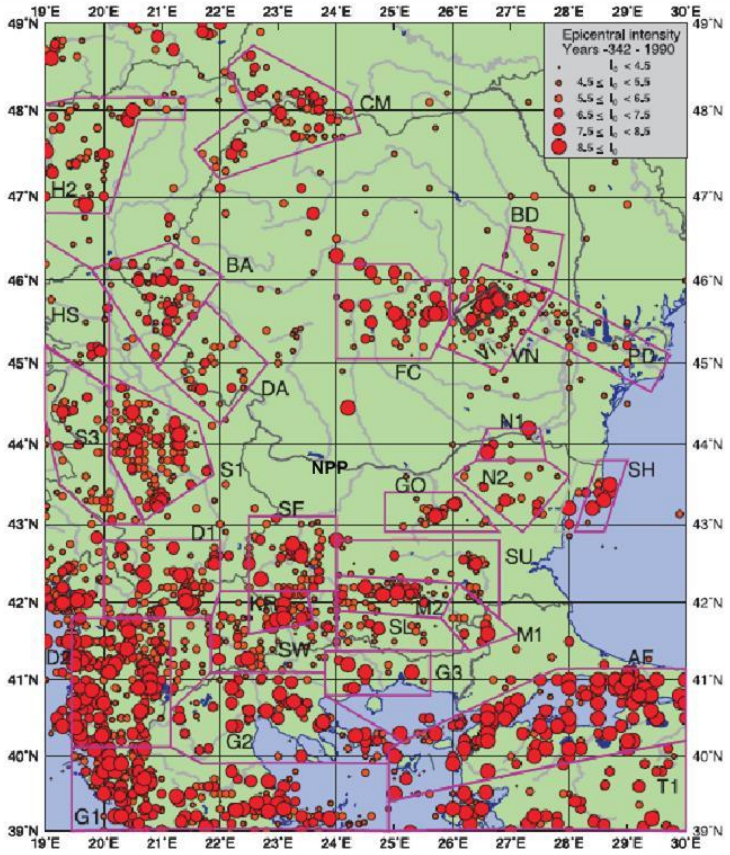 The image of the spatial distribution of the earthquakes with a magntidue higher than 4.0 in the regional are of Kozloduy NPP which have been used for the assessment of the seismic hazard in the new seismic regioning (which entered into force 2012) has been presented in Chapter 3 of the EIA Report (Figure 3.4 14). The catalogue has been reviewed for doubling of events. The after-shock events have been

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		Mr Radut: We are partially satisfied, but to make a calculation - the distance comparison between Kozloduy and Cernavoda is not entirely scientific. The earthquake in 1977 impacted Craiova and	identified and eliminated via the application of the magnitude-dependent space and time window for the Balkan Region. The final catalogue consists of 3300 independent events with M≥4.0. The results obtained in the course of the study of the seismic hazard with the new seismic regioning can be reviewed as one more confirmation of the already made conclusion that from seismic point of view the local 30km are and the sub-regional 50 km area around the site of the Kozloduy NPP are part of the calmest parts of the territory of the Central Balkans. The EIA report is the main preventive instrument that guarantees the fact that the environmental impact assessment is performed at the earliest possible stage. As per the licensing procedure, the next stage is the specific study, analysis and evaluation of the site selection which includes quantitative analysis of the seismic risk. Such analysis has been performed and submitted in 2014 with the latest data, which is currently being verified by independent sources. The data from this analysis confirm the data that has been known up to now regarding the seismic risk. This means that the data up to now which concern the seismic risk, such as seismic risk of facilities and equipment have been well assessed and considered, whereas the latter is also confirmed by the fact that for 40 years of operation of the power plant there have been no major or high level incidents. In addition the seismic characteristics included in the EIA-R have been verified multiple times by the International Atomic Energy Agency (IAEA), with the last two reviews being in 2008 and 2011. In 2011 stress-tests were carried out not only for the impact of the Vrancea earthquakes, but for the whole area. It was established that the design seismic characteristics are within the required regulatory values with a significant margin.. Studies for existence of local faults were carried out in the local zone. Such faults have not been found in the 30-km sub-regional area, and the 5-km sub-local area.

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		there were a lot of ruined buildings. The distance between Kozloduy and Craiova is about 80 km. I would not like to go into further detail in this question and I will put them forward in writing to the institutions.	
3.	Marcel Radut, Pro Democratia Association, Craiova Club	Does the Bulgarian party know that there have been problems or errors established in the design of reactor AP-1000? **Mr Radut:** We are glad to hear that the Bulgarian party is following the development of the AP-1000 reactor and I would like to suggest that the Bulgarian party see the construction of this reactor, especially in China. The answer satisfies us partially – we will send the request to the Romanian party together with the published data from the press.	All news regarding the projects of Westinghouse, including AP-1000, as well as all other nuclear projects are carefully followed by the experts of the nuclear power plant as part of their professional obligations. There is information on such technical observations made, but none of which is related to safety. It is normal for each project designed for the first time to go through this early stage. The preliminary Shareholders' Agreement with Westinghouse was concluded in August and reflected in the Bulgarian and international media. The Agreement determines the conditions and the parameters of the potential participation of Westinghouse in the Project Company as a shareholder. The shareholders' agreement itself has not entered into force, because an approval by the Bulgarian Government is pending, which is not a fact as of the present moment. The shareholders' agreement is not a contract for the construction of the new power plant. According to the requirements of the Safe Use of Nuclear Energy Act (SUNEA), in Bulgaria a nuclear power plant can be constructed with a decision of the Council of Ministers, following a proposal of the Minister of Energy. Such a decision has not yet been taken by the Bulgarian Government. The EIA report considers on equal basis different reactor models and all of them are potential options for realization up until the moment of signing a specific contract for the construction of the power plant.

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4.	Marcel Radut, Pro Democratia Association, Craiova Club	Is it true that the Bulgarian citizens boycotted the national referendum that was organised a while ago for use of nuclear energy in Bulgaria? **Mr Radut:** This is a question of interpretation – I am actually speaking about the figures provided by the Bulgarian press. What was announced in the press was that 21% percent of the voters turned out. I would suggest that before starting to convince the Romanian citizens how good and clean it would be, you should try to convince the Bulgarians.	This question concerns sociological aspects not related to the EIA procedure. The Bulgarian referendum legislation is highly restrictive, in a sense that the competent authorities have defined that in order to have a legitimate referendum, the turnout should be equal to or higher than the one in the last parliamentary elections. This means that the referendum on nuclear energy had to attract at least 4.3 million Bulgarian citizens. The question was formulated in the following way: "Should Nuclear Energy be developed in Bulgaria through construction of a new nuclear unit?" The referendum was not boycotted, but it did not attract 4.3 million voters. The voters who voted were 1.4 million. There is no reason to believe that the referendum was boycotted, as most of the voters (60%) replied with "yes" to the question. 60.6% said "yes", 37.9% said "no" and there was 1% non-valid bulletins (not filled in as required). The referendum indirectly, and similarly to a sociological study, showed that Bulgaria supports Nuclear Energy, as all previous national studies have shown more than 60% support for it. The referendum was unsuccessful **due to the low turn-out**, but it undoubtedly showed, that society expects the development of nuclear energy. See the response to question 12 from Dabuleni.
5.	Marcel Radut, Pro Democratia Association, Craiova Club	Is it true that eco-protection organisation in Bulgaria and the International organisation Greenpeace have protested against nuclear power in Bulgaria and have requested shutdown of the plant?	As regards the EIA procedure for the NNU, Bulgarian ecological organisations received full access to the EIA Report documentation and were provided with the possibility to express their opinion during the public hearings held on the territory of the Republic of Bulgaria. None of these organisations has been stopped from expressing its position. During the whole process of preparation of the public debates in Bulgaria, the Employer ensured the transparency of the project by

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			broadcasting advertisements of the debates in the local radio stations and TV channels, a month before the first debate, also on the two websites of the Employer and KNPP, where invitations were published for the public hearings. What is more, Kozloduy NPP – New Build Plc. met with the mayors of all five municipalities within the 30-km area and invited them to participate in the meetings.
6.	Violeta Ciuciuc, NGO Asociatia Dabuleni Impreuna pentru Viitor, Dabuleni	1. I would like to ask you for an exercise, could we imagine that we are in the future – it is expected that the new unit will enter into operation within 7-8 years. What will happen if, then it is established that there would be negative impact on the flora and fauna? What would you do – will you close the plant, or try to minimise the effects? 2. If three types of bird species get extinct, what would you do?	1. The EIA decisions are always accompanied by respective conditions, which are mandatory for implementation by the Employer and which are subject to supervision by the competent state authorities. If a violation is ascertained during the inspections or failure to execute the conditions under the EIA decision, coercive administrative measures are applied such as: mandatory injunctions, fines or even ceasing the activity of the company. The ascertained non-compliances can usually be resolved via the respective measures (technical and/or organisational). The operator of the facility assesses whether to modernise the unit or not or to cease its activity. In recent years in the Republic of Bulgaria several thermal power plants stopped their activity exactly due to this reason. 2. We can imagine that three types of birds will disappear, but for to achieve this the reasons and factors for the extinction of the three bird species need to be clarified. In the 40-year history of KNPP operation and in the assessment of the new nuclear unit it is seen that there are no such reasons, i.e. it cannot be expected that extinction of bird species would be due to the operation of Kozloduy NPP and the NNU. It should also be added that since 1977, median count of the birds is performed, which is done in parallel with all European countries, including Romania. The data shows that there is no reason for concern. What is more, within the region of thermal impact of the KNPP, of the Danube River and the coastal area of Bistret, increase of a world endangered species has been observed – of the *Pelicanus Crispus*. This is an example that the thermal impact is not only with negative direction,

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			but it may have positive impact.
7.	Boriana Hrisimova, Political Party (PP) "Zelenite"	Ms Hrisimova made a statement: If today, at this public debate, the citizens of Craiova say "no" to this new nuclear unit, then it will not be built. Now is the moment for them to make their choice. Now, a short statement and a few questions. The Zelenite PP is against nuclear energy, all over the world, indifferent of where it is constructed – Bulgaria, Romania, Serbia, Patagonia. Second, the Greens are against nuclear energy, indifferent of the proposed technology, type of reactor, or nationality of the investor – Russian, American, French, or other. We are also against the new nuclear unit proposed for Kozloduy. Third, nuclear energy is expensive and dangerous. It helps the distribution of nuclear weapons and it has no place in the energy mix of Europe. The Green politicians in Europe take responsibility to stand for the decommissioning of nuclear energy, and at the same time we take care that this will not increase carbon emissions. We stand for the immediate shutdown of the riskiest nuclear power plants. We must stop direct and indirect subsidies and to insist that the existing operators carry full responsibility for the damage from nuclear incidents. Fourth, there is no safe nuclear power plant in the world. Every NPP bares a potential risk for a major incident, such as the one in Chernobyl, Fukushima and Three Mile Island. No one can insure us against human error or natural disasters – no one. It is necessary to apply the principle of prudence. Here we heard how small the risk is – 1 in 10 million, but who could say what the risk was from 11 September 2001. For every NPP and depositories, there is a real risk of explosion during wars and terrorist attacks. Fifth, the Greens in Bulgaria, Romania and Europe, fight the energy and nuclear mafia. We are confident that the future lies within energy independence of dwellings and municipalities, through renewable energy sources and energy efficiency. In this way, we will be the ones determining the price of electricity - we, the local population. Now to the specific presentation of the investor.	Ms Hrisimova made a personal address to the citizens of Craiova based on no legal argumentsl expressing her personal position against nuclear energy. In this statement we turn to several issues to which we provide the following answers:

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		1. This is not an Environmental Impact Assessment, but yet again a description of the environmental ambience to the NPP and a perfect-case scenario for operation under ideal conditions. The exposes lack the most important data on risk. The investor only informed us in a sentence that all modelling data was taken into consideration in the preparation of the report. They told us to be calm – "trust me". Well I do not.	1. As regards the claim that this is just a simple description of the environment surrounding the NPP and a perfect scenario for the operation of the nuclear power plant in ideal conditions: EIA Directive 2011/92/EU modified with Directive 2014/52/EU of the European Parliament and the Council dated 16 April 2014 as regards the impact assessment from some public and private projects on the environment, as well as the ESPOO Convention, contain series of conditions regarding the content of the EIA Report, whereas one of them is a description of the environment, for which there is probability of being affected by the foreseen activity. In Chapter 3 of the EIA Report there is a description and analysis provided for the environmental components and factors for the existing facilities at the Kozloduy NPP site at the time of developing of the EIA Report. In Chapter 4 of the EIA Report there is a description and analysis provided for the environmental components and factors for the investment proposal during normal operation. All environmental components have been reviewed and evaluated. In Chapter 5 there is an assessment performed for the cumulative impact from all existing facilities and facilities planned for construction at or in close proximity to the Kozloduy NPP site.
		2. Give us the data – how many direct victims will there in case of an accident? What would happen in case of a direct attack on the depositories for RAW? For example, if an airplane crashes there on purpose?	2. In Chapter 6 of the EIA Report the environmental risks have been assessed in case of potential accidents and incidents. Evident from the above, Ms Hrisimova is not even familiar with the contents of the EIA Report.
		3. Third, there are no alternatives given to the 1000 MW nuclear power. The four sites have simply different locations. A strategic ecological assessment is needed. Give us quantifiable data with values for 1000 MW from renewable energy sources. These are the viable alternatives.	3. As regards the statement, that there aren't offered alternatives of the 1000MW nuclear power: In fulfillment of the requirements of the Environmental Protection Act in the developed EIA report, Chapter 2 "Zero" alternative is considered: Choice of another technology for electricity production. Actually, the "zero" alternative, or a decision not to undertake any actions for the implementation of this proposed investment project

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			at the Kozloduy NPP site, is tantamount to relinquishing the construction of any new nuclear capacity in the country in the foreseeable future. Such decision contradicts the objectives laid down in the country's National Energy Strategy for launching new nuclear capacities and increasing the share of electric energy generated by nuclear power plants by 2020. From the viewpoint of the electric energy sector, abandoning the possibility of building a new nuclear unit means to construct a new non-nuclear capacity with electric output of 1000–2000 MW. Taking into account the country's energy resources, the required new energy capacity will most probably have to be provided by thermal power stations, which will be located elsewhere. This will require surveying a new site and new planning, technical works, preparation of the site and construction to a tight schedule, in view of building a thermal power plant with output of 2000 MW. The building of new capacity replacing Kozloduy NPP, in case of abandoning the option for construction of nuclear capacity, could theoretically be achieved following different choices, the most probable of which is a new thermal power plant, taking into account the energy resources and the fuel-energy balance of the country. Environmental consequences of the "Zero" alternative are represented in EIA report. In this sense, when it comes to investment proposals representing energy projects what should be considered as well is the capacity, structure and possibilities of regulating the country's electrical power system (EPS), impact of the new capacity on it and conditions for maintaining stability of EPS, change in the mix of the production capacities comprising the generating capacity of EPS and others. The structure of national EPS includes: - Base load capacity – NPP and TPP. The latter also provide ancillary services. The plants, providing ancillary services, ensure security of operation of the EPS and

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			security of energy supplies, regulated by Directives 2009/72/EC and 2005/89/EC. In practice, these plants are crucial for the credibility of any EPS, respectively, to the vitality of each electricity market. - priority production capacities - RES. WPP have the highest estimated proportion among plants with priority production. Volatility of the primary energy resources of RES leads to problems with maintaining the balance between production and consumption. This requires paying special attention to balancing and regulating capacities when planning the capacity balance. - balancing and redundant capacities – TPP. According to the Development Plan of the transmission network of Bulgaria for the period 2010-2020 and information from producers by 2015 TPP "Varna" and "Bobov Dol", "Maritsa 3" and TPP "Rousse", unit 4 C will be decommissioned, currently involved in maintaining the balance between production and consumption in a 24-hour base. They are expected to be replaced by TPP "AES Galabovo" and RES. - regulating capacities - hydro and thermal power plants. Constant load changes and the inevitable disruption in the EPS require a sufficient reserve with a variety of speed characteristics. Fluctuations in the power of WPP have further impact on the amount and quality of the reserves for secondary and tertiary regulation. The energy strategy of the Republic of Bulgaria until 2020, which reflects the current framework of the European energy policy and the energy technology global tendencies, was adopted in June 2011. The main priorities in the energy strategy can be summarized in the following five areas: ensuring security of energy supply; attainment of the targets for renewable energy; energy efficiency improvement; development of a competitive energy market and policy with the aim to ensure the energy demand, and consumer's interest's

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			protection. The main priorities in the construction and operation of electrical generation capacities are: - renewable energy sources (RES) – a priority in the national energy policy, as important inexhaustible local resources. To achieve more than 16% share of RES in gross energy consumption in the country after 2020, water potential and other sources of clean energy (wind, solar, geothermal, biomass) will be used to the maximum extent. - construction of 2000 MW new nuclear capacities. The significant increase of connected to the Bulgarian electrical power system (EPS) capacities and the RES electricity generation (mainly wind power plants (WPP) and photovoltaic power plants (PV)) in the recent years raises the following major issues - real-time balancing between the production and consumption in the presence of RES electricity generation significant fluctuations. WPP and PV operating power are directly dependent on the intensity of the wind and the solar radiation intensity. Fluctuations in the operating power of WPP and PV are compensated by conventional power plants, mainly by Hydro Power Plants (HPP) load changes. In terms of the requirements to the Bulgarian EPS in the ENTSO-E electricity alliance exchange capacity regulation, the capability of our EPS to connect new WPP and PV is limited and is defined by the currently available regulating capacities and the available regulating range. The large amount of RES will cause major and swift changes in the production - consumption balance of our EPS and without sufficient regulation capacities will lead to neighbor EPS, ENTSO-E member's electricity exchange schedules disruption, for which sanctions may be imposed to Bulgaria. The present RES power plants can not provide to the electricity system operator additional services (primary regulation, secondary regulation, tertiary regulation, voltage regulation).

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			In this regard it is necessary, through the relevant economic mechanisms, the optimal investment process in building of WPP and PV to be managed in such a way, that on one hand Directive 2009/28/EU, in part for RES electricity production and consumption to be implemented, and on the other hand, the quality of the Bulgarian EPS control and the security of electricity supply in accordance with the ENTSO-E requirements not to be affected. The analysis of technical options for the Bulgarian EPS management under the existing physical conditions and the planned production capacities development shows that for ensuring the management quality and the security of energy supplies, in accordance with the ENTSO-E standards, a precise modification in the management of the installed capacity mix is required. Therefore, only the installation of 1,000 MW of RES which are not base load power capacities, without construction of new base load power, and given the forthcoming decommissioning of such facilities will severely disrupt the generation infrastructure and impede the real time production - consumption balance, because of the RES unsteady and unpredictable regime of electricity generation, and in this regard essentially this is not a real alternative to the investment proposal. Therefore the consultant who prepared the Environmental impact assessment report (EIAR) has examined (above) as an alternative the installation of a thermal power plant (TPP) (as both power plants operate in base load mode).
		4. Fourth, Uranium is a rare and depleting fuel. What is its current price? The prognosis expects constant increase. If we are in a petrol war, could it happen that we are in a Uranium war in a few years?	4. As regards the Uranium prices: See the response to question 8.
		5. And to my favourite topic – waste. What happens to the Plasma Melting Facility, which works 24/7, when the filters stop for maintenance? This is necessary at least once every 24 hours. What happens to the emissions in this period? Where is the toxic dust stored, captured by the filters and as a result of the melt?	5. As regards the questions asked in relation to the Plasma Melting Facility, the following information is hereby provided: In compliance with the Technical Design of the Plasma Melting Facility (PMF), which has been approved by the BNRA, operation of

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		The so called fly-ash and bottom ash?	4000 hours per year (8760 hours) is foreseen. This is the period between two outages. Shutting the facility down every 24 hours for change of filters is not envisaged in the design. The Plasma Melting Facility operates with a cyclic inlet of waste envisaged for incineration. Within 1 hour the introduced waste is between 55 and 60 kg. The difference between the typical incinerators and the plasma incineration installation is that with the typical incinerators only combustible waste are introduced, whereas with the PMF both combustible and non-combustible waste are introduced. The combustible waste is incinerated to ash, whereas the non-combustible is melted and during the cooldown process is vetrified. The cyclic inlet of waste for incineration allows for the installation to be stopped almost inertia-free which is one of the other main advantages of the plasma installations. The filtering system of the installation is a combination of 5 (five) different technologies for purification of flue gas. These are as follows: 1. Secondary chamber for further incineration of soot or other fly-ash in the flue gas. Here there is 100% redundancy (back-up) of the torches: one is in operation, the other is in back-up. 2. Mechanical purification of flue gas, equipped with self-clean-up system. 3. Scrubber for chemical purification of flue gas. 4. Highly effective HEPA filters for purification of aerosols. 5. Chemical system for purification of flue gas from nitrogen oxides. The filter group of the Plasma Melting Facility (PMF) consists of: • ***Mechanical filter*** intended for mechanical capturing of particulate matter which is transferred from the furnace chamber with the flue gas. This filter is not subject to change within the yearly operational campaign of the installation (4000 hours). It is self-purifying via vibrating

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			(shaking) mechanisms and periodic pneumatic blowdowns. The separate particulate matter is collected in the lower part of the filter in a barrel, which is leak-tightly attached to the filter. • ***Scrubber***, which via chemical reaction releases the chlorides, sulphates (R SO4) and sulphites (R SO3) contained in the flue gas (NaOH), is maintained via measurement of the pH of the medium and adding of NaOH via circulation pumps. The pumps are two, whereas one of them is in operational mode and the other one is redundant. This filter is not subject to change within the frames of the inter-outage period of 4000 hours. • ***HEPA filter*** (high efficient pressure air filter) – this filter is intended for capturing the aerosols potentially contained in the flue gas. Two parallel filters are installed on the route of the flue gas, whereas one of them is in operation and the other one is redundant. This filter has a 99, 997% efficiency in purifying the flue gas. This is the only unit of the filtering system which might need to be substituted before the 4000-hour operational campaign of the installation has ended and for this reason in particular there is a redundant (back-up) parallel filter installed. This filter is isolated with cut-off valves and can be substituted anytime with no risk to the installation, the environment or the servicing staff; The last filter before the flue fans (they are also two, installed in parallel whereas one of them is in operation, and the other is redundant) is the DeNOx System. This system is intended to separate a whole specter of nitrogen oxides NOx from the flue gas via chemical reaction. This filter is also intended to operate during the whole operational campaign with no need for maintenance or substitution. During the Factory Acceptance Tests (FATs) the filter group equipment achieved purification of the flue gas of 99, 9999%, which exceeds the

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			percentage of 99, 997 % set out in the Technical Design. The mass balance of the PMF is known and it was confirmed during these FATs. This balance is to be confirmed once again during the On-site acceptance tests which are to be performed at the Kozloduy NPP site with "clean" non-radioactive waste. So, in the operational documentation of the installation it is known at what interval is the barrel filled with particulate matter from the mechanical filter going to be changed. In practice there is a 100% redundancy of the filtering system, so that there is no probability of discharges into the atmosphere due to failed (non-operational) filters. The melt form the furnace chamber which is produced for one hour of operation of the PMF is calculated in such a way that it fills in exactly one cooldown vessel. The management of "bottom ash" is performed by packing the barrels with the vitrified ash in Type A Packages. The mechanical qualities of the melt significantly exceed the qualities of the cement matrix in which currently the solid RAW are immobilised during their conditioning at the RAW Processing Workshop which operated at the Kozloduy NPP site and it is the first barrier from the multi-barrier approach for isolation of the RAW from the environment. The barrels with the "fly-ash" particulate matter are managed under the technology introduced in the RAW management workshop for management of secondary waste. Four formulas for RAW cementation are introduced in operation. The decommissioned HEPA Filters are managed in the very same way as the decommissioned HEPA Filters from the suction ventilation systems operating in and in service in the Controlled Area.
		6. Lastly, I would like to remind the citizens of Craiova once more	6. This is a declarative statement. There is no question.

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		that if today they say "no", there will be no nuclear unit. 7. How many direct victims would there be in case of an incident, according to the simulations that the experts claim to have made? 8. Mrs Hrisimova claimed that Mrs Gromkova is trying to mislead the population that they would be able to participate in risk analyses. Both legislations foresee only one possibility for the people to say "no" and this is at this time and this is why she was here.	7. As regards the numbe of direct victims in case of an accident: see response to question 8. 8. In her claim Ms Hrisimova mixed up the two procedures – the EIA procedure and the Procedure for taking a decision as regards the construction of a new nuclear power plant, as per the Bulgarian legislation. The description of the decision-making procedure for the construction of a new nuclear power plant is located in the response to question 8.
8.	Boriana Hrisimova, Political Party (PP) "Zelenite"	1. What is the price of Uranium at the moment? 2. You are trying to say that the economic questions have no place at this debate.	1. The topic of fuel price is part of the terms of reference for the construction of a new nuclear unit. The Bulgarian legislative provisions do not require this justification to be part of the Environmental Impact Assessment Report (EIA-R). 2. A nuclear power plant construction follows a decision of the Council of Ministers (CoM), in connection with a proposal of the Minister of Energy, consistent with the provisions of article 45 of the Safe Use of Nuclear Energy Act (SUNEA). The decision of the CoM was made in response to the Minister's proposal where the following items were evaluated: – nuclear safety and radiation protection, environmental impact, and physical protection; – socio-economic impact of the construction of a new nuclear power unit for the entire country or separate regions; – radioactive waste and spent nuclear fuel generated as a result of the nuclear power plant operation, and the RAW and SNF

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			management.
		3. When will we be able to discuss the economic question of this investment proposal? There is no procedure that allows the public to express its opinion that is held by the Ministry of Energy. You are simply refusing to answer the "uncomfortable" questions that are of true importance for the public.	3. The Minister of Energy organised public hearings of the proposal for nuclear new build. The Minister's Report has attachments evaluating the results from public hearings involving representatives of government bodies, local authorities, public organisations and stakeholders such as physical or legal bodies. The public receives notification of the public hearings at least a month before the event.
		4. I will leave the last questions, as the easiest – those for waste. All my questions so far are trying to underling, at the only forum foreseen by the legislation, that you are in fact not ready to provide the information of interest, such as the results of modelling.	4. The results from the modelling of risks from accidents are placed in chapter 6 of the EIA-R. The environmental radiation risk characteristics considered apply to both design and severe accidents. Conservative approach was used to determine sources, so that it can be applied to all reactor models considered. In addition, assessments were undertaken on the eventual man-induced and natural impacts on the nuclear site. The team of experts arrived at the following major conclusions: • It can be concluded from the results of the analyses conducted that the radiological results from the analysed accidents confirm the acceptability of the environmental risks. • The results from the design basis accidents assessment demonstrate that for a random hypothetical design accident, human exposure does not require the undertaking of any urgent protective actions, not even within the closest inhabited zone around the new nuclear unit (NNU). • When modelling the radiological effects of major accidents, the threshold limits were not reached, and, therefore, no urgent precautionary measures beyond the existing emergency

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			planning zones of Kozloduy NPP would be required. If subsequent precautionary measures are meant, no permanent migration is assumed even for the closest populated zone around the NNU.
		5. 5. How many victims would there be?	5. Pursuant to the above, no casualties are expected as the estimated radiological consequences are only negligible compared against the thresholds for prevention of deterministic effects, and absorbed dose of 1-2 Gy. These results for the new reactor designs are due to the fact that the design considers system for severe accident management involving fuel melt down that is the worst scenario possible. In other words, action has been taken to prevent impacts on the environment and public similar to major accidents such as the ones in Chernobyl, Three Mile Island or Fukushima.
9.	Sandu Florin Tudor, NGO Terra Millenium III	1. Some of things were already clarified regarding emergency situations, but still: In case of a large incident, have there been simulations that regard the number of countries that would be impacted from such an incident?	1. The analyses of accidents risk assessment are presented in Chapter 6 of the EIA-R. In order to prove the feasibility of the main dose criteria for the site of the new nuclear unit, a boundary reference PWR 1000 MW nuclear unit has been considered to possess all the most adverse characteristics of each of the units proposed for construction. This means that the most adverse case for emissions has been reviewed, and the maximum possible conservatism of assessment has been reached. The data obtained demonstrate that the dose criteria are complied with for both design and severe accidents. It can be concluded from the analyses conducted that the radiological data resulting from the analysed accidents confirm the acceptability of the environmental risks. The results from the design basis accidents assessment demonstrate that for a random hypothetical design accident, human exposure does not require the undertaking of any urgent protective actions, not even within the closest inhabited zone around the new nuclear unit (NNU).

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			When modelling the radiological effects of major accidents, the threshold limits were not reached, and, therefore, no urgent precautionary measures beyond the existing emergency planning zones of Kozloduy NPP would be required. The potential evacuation zone size is 1 km as a maximum. The potential sheltering zone size is 8 km as a maximum. If subsequent precautionary measures are meant, no permanent migration is assumed even for the closest populated zone around the NNU. In this case, regulation of distribution and consumption of agricultural production within up to 30 km from the source term, depending on the direction of contamination, should not be excluded.
		2. Thank you for revealing the plan in case of an accident. We should not forget that there are many protected areas in the region, what would happen to them?	2. Within the 30-km zone there are protected zones under Natura 2000, 4 of which in Bulgaria and another 4 in Romania, as well as one protected zone which is the island of Ibisha in the Danube. All these zones have been evaluated in terms of their biological diversity. Local studies have been conducted on the Romanian territory and with the help of Romanian specialists. Also, additional radioactivity measurements were undertaken, using dosimeters, within the protected zones as per NATURA 2000. All the measurement points are identified within the report. The dose rate values measured in the protected areas do not differ from the natural background values, which is conformed by the radiological monitoring implemented by Kozloduy NPP, the results of which have been reported in Chapter 9 - Monitoring. The only impact found was the thermal one, as a result of the cooling water discharge canal flowing in the Danube. This impact stays within the regulated limits. It only concerns the Bulgarian protected area of the Kozloduy Island easternmost section, and does not reach the Romanian river banks. The protected zones as per NATURA 2000 within the 30-km radius on the Bulgarian territory, have been described and evaluated in Appendix 2 to the EIA-R, while the ones on the Romanian territory

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		3. My question was – in case of a nuclear incident, will the radiation reach the delta of the Danube.	have been provided in Chapter 11 of the EIA-R. 3. When modelling the radiological effects of major accidents, Chapter 11 0f EIA-R, the threshold limits were not reached, and, therefore, no urgent precautionary measures beyond the existing emergency planning zones of Kozloduy NPP would be required. **No urgent precautionary measures are necessitated within a radius of 200 km** while the estimated values are about 100 times lower than the criteria, requiring resorting to protective action. The potential **radiation** consequences of a severe accident are restricted in the safety requirements for new nuclear plants in a way that the release of radioactive substances shall not cause either a significant public exposure or detriment to public health in immediate proximity to the nuclear power plant, or lead to the imposition of long-term and large-area restrictions in the regulation of the food chains, in the use of the soil, or of the water bodies. In addition, in Chapter 4 section 4.2. "Modelling the migration of radionuclides in the aquifers and drainage zones potentially threatened with contamination", 3D models have been developed for the spread of man-induced radionuclides within the aquifers. The following major **conclusion** can be drawn from the analysis: **No transboundary impact is expected**. In the light of the above it can be highlighted, that no negative impact can be expected on the Danube delta in case of a major accident.
10.	Mrs Luminita Simoiu, Chemistry Faculty, Craiova University	There is a science called Risk Management, and this science that I have studied as an expert-chemist says that if there is a small possibility for an event to happen, and I am speaking of a negative event that would affect a large number of people, and in case such an event has happened once, even if it happens 1 every 100 years, then the decision that is usually taken is to stop the activity that caused it. I would like to thank for the presentation and congratulate the	Ms Simoiu has expressed her opinion on nuclear energy, and as stated in her opinion there are "**no questions**". Regardless of the absence of questions we are obliged to state that the environmental hazards in case of potential accidents and incidents are considered in Chapter 6 of the EIA-Report. Chapters 4 and 5 of the EIA-R evaluate the environmental health and hygiene aspects and the risk for human health, as well as the

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		Bulgarian party for them. I work as an expert-chemist in the Craiova University and in the presentation that we heard, it was said on numerous occasions that the possibility is very small or the risk of impact does not exist. Form the international experience that I have, as part of the UN, I have seen many reliable presentations, but if we want to be convincing, we also need to point out the serious risks and measures that would be taken. In your presentation, I saw technical graphs, as a non-specialist, they look convincing to me. My belief was that for a public debate, the language should be more popular, and such presentation would be more suitable for experts in the field of risk management, seismology etc., to meet, discuss and then present conclusions to the wide public. Here I represent the wide public, as a citizen of Craiova, and it is clear that not many citizens of the city would be able to attend the City hall, which means that we here represent those who were unable to attend, and I ask to be allowed to mention the names of the people I am representing and to share the negative experience of Romania after the Chernobyl incident, as even 40 years later, there are and will be consequences, even at a distance of 800 km between Craiova and Chernobyl. This means that this is an accident that hurt innocent Romanian population and I would like to say and ask you to note in the Minutes, that I am saying a "No" to the construction of this new unit. With regards to the start of the presentation, the creation of new working places and socio-economic benefits, I know the intelligence of my colleagues from the Bulgarian institutes, but I think that we can also create new working places through alternative energy sources and we, the people of today, have an obligation not to repeat the mistakes of the past. I have **no questions**, as I am not an expert in the field.	radiation risk for the public in the event of radioactive releases.
11.	Aurora Reiss, Chemistry Department, University of Craiova	I would like to say that I highly assess and like the speech of the Bulgarian lady that spoke earlier, before my colleague. I agree with her and I appreciate her opinion and also have the same opinion as my colleague – "No" to the construction of a nuclear power plant. It is a known fact that a nuclear power plant is less polluting in some aspects than, for instance, a thermal power plant, and here I mean carbon dioxide, which increases the greenhouse effect, but a nuclear	

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		power plant has two large problems, or this is at least my opinion: 1. The first problem is related to the RAW storage facilities 2. The second is related to nuclear accidents. 3. My question is, in case of a chain nuclear accident, whether according to your report you have provisioned such a case and whether in such a case, there would be consequences for us, that is for Romania? I would just like to add one more thing – that I also believe that an assessment of the impact should conclude with an assessment of the risks and I am saying this because years ago I was teaching a course on Methodologies for preparing EIA and Risk Assessment. What would happen in case of a chain nuclear accident, such as the Chernobyl accident? Whether according to your report you have provisioned such a case and whether in such a case, there would be consequences for us, that is, for Romania? Have you considered such a case?	1. Regarding the RAW issue - see the response to question 3, asked in Dabuleni 2. Regarding the nuclear accident issue - see the response to question 9 3. This question refers to a case of a severe accident. Such an accident involves fuel melt down. Modern generations of reactors have been designed with severe accident management systems, the purpose of which is to mitigate the environmental consequences and prevent impacts such as those resulting from the Chernobyl or Fukushima accidents. The probability of such accidents occurring is 1 in 1 000 000; this is due to the implemented up-to-date passive protection systems that do not require human intervention, or power supply. Assessments of the severe accident risk were made for the purpose of the EIA, and the data obtained are shown in Chapter 6 of the report.
Public hearings, held on 20 November 2014, at 14:00 hrs, at the Amphiteather hall of the Ecological University of Bucharest (EUB), General Vasile Milea Blvd nr 1G, sector 6, Bucharest, Romania			
1.	Albena Simeonova	Statement: After the extremely useful meetings, at least for me, held in Dabuleni and Craiova and especially the questions put forward by the scientists and representatives of NGOs, including ProDemocratia in Craiova, I would like to say that the comments of the Bulgarian and Romanian organisations are not very different. After the meeting in Dabuleni, I managed to meet colleagues of mine,	These are personal concerns of Ms. Simeonova that are not based on any facts or data; this is simply a statement that repeats what has already been said in Dabuleni - see comments to item 12 , Dabuleni. The following supplement can be made: **With regards to the opinion on the agricultural production:**

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		farmers, living in the region of Dabuleni and Bechet. Apart from the main concerns that their business is currently suffering and will suffer in the future, it turned out that the people are not at all informed about a potential evacuation plan in case something happens at the KNPP. In this sense, I do not know how exactly you have done your job, but it is insufficient and you have the obligation to do as your western colleagues and communicate the information in the place through institutions, organisations and media. Regarding the EIA: In Dabuleni, the hall was full (within the 10-km area). In Craiova – the hall was half-full and here, there are 5, 6 or 7 people from Bucharest. At the discussion on the Belene EIA in Sofia, there were 8 people from Sofia present. They probably think that Kozloduy is very far away, like we thought that Chernobyl is too far away. You said that the population in Bulgaria supports the nuclear unit. After the referendum that was held on 27 January in Bulgaria, 20% of the population voted. Of them, 60% voted "for", which makes about 12% of the total population. Well, if so many support the NPP so much, why did they not support the construction of a new unit? There was also a referendum in Kozloduy, where the larger part of the population voted in favour of a nuclear unit, but for the question if they agree with a RAW Storage facility, the population as a whole said no. I am also sure that the local authorities had concerns and I will quote a letter from the mayor of Kozloduy, Rumen Manoev, with questions related to the gamma dose rate measurement: There is a lack of analysis for the discharged radioactive particles from the ventilation stacks (VTs) in the atmosphere. These are aerosols, I-131 and gases. On 11 April 2013, the mayor of Kozloduy in a softer formulation asked a question "Can the monthly and yearly admissible limits be determined for the aerosol gas discharges from the vent stacks for radioactive noble gases Iodine-131 and long-living aerosols." I would like to clarify that there cannot be admissible level of	The results of the monitoring performed by Kozloduy NPP have been reported in Chapter 9 - Monitoring. This monitoring covers all the areas where any impact from the Kozloduy NPP operation may be expected, namely: soil, vegetation, surface water, agricultural production, food stuffs, and dose exposure of the public. The main conclusion is that over the long years of operation of Kozloduy NPP not any kind of impact on agricultural production has ever been found. The man induced activity has always been below the minimum detectable level. All of the activity detected in the fauna and the environment is due to the natural isotope K-40. **Regarding the level of information provided to the public in connection with the operation of Kozloduy NPP** The legal requirement is that Kozloduy NPP shall regularly submit information to the competent authorities in the country. To this effect, the annual monitoring reports are issued to the Ministry of Environment and Waters, the Bulgarian Nuclear Regulatory Agency and the NCRRP. The inhabitants of the municipalities lying in the vicinity of the power plant receive information on a monthly basis about the monitoring of the main environmental components such as radiation background, air radioactivity, radiation indices of water from the Danube, radioactivity of food (cow's milk). **On the lack of control levels for radioactive releases to the environment** Kozloduy NPP has releases control levels defined by the regulator and in conformity with the normative requirements. They are required by the national regulator, in accordance with the requirements of the International Atomic Energy Agency (IAEA) and Euratom. The actual releases from Kozloduy NPP are less than 1% of the specified limits. The impact on the population is negligible, i.e. below the established values of 10 μSv per year for release from regulatory control, as defined by the International Commission on Radiation Protection (ICRP).

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		pollution with radioactive particles discharged into the atmosphere, as each such particle is of fatal danger for the human organism. From the above data on environmental impact, from the generated in the operation of KNPP, including new nuclear unit 7, radioactive discharges in the atmosphere and in the Danube River, together with the Spent Nuclear fuel to be buried somewhere in the territory of Bulgaria, we cannot accept the incorrect conclusion of the authors of the EIA-R. Pages 50 to 171 of Folder 3, Part 4.7.2 Radioactive Particles and Conclusion 4.2.7.4 Conclusion on the impact say: "The expected radioactive impact from radioactive particles will be only at the site of the NPP." I would like to quote a conclusion of the EIA-R authors. This concerns parameters for environmental impact for the radioactive discharges generated from the operation of the KNPP: "Probability of existing of the event: expected; Type of impact – negative, direct, primary; Characteristics of the impact – radiological; Duration – long-term; Cumulative – yes; " Now is the time, in this public hearing, based on the facts admitted by the authors of the EIA-R, when we should underline to the widest possible circle of the Bulgarian and Romanian public, the unspoken and for years hidden truths that the atmosphere does not have thresholds for radioactive discharge of cancer-inducing particles from the vent stacks of the units and that the waters of the Danube river cannot be isolated from the discharged radioactive waters from the waste waters of the NPP. At the same time the burying of the SNF as RAW will destroy the territory of the two countries for billions of years with a risk of harming the population for million years. I really liked the idea of our colleagues from Craiova, ProDemocratia NGO, to organise a local referendum whether you want or you do not want a 7th unit of the KNPP and you have that right.	In Kozloduy NPP there are not only annual set limits, but there are also monthly, daily and hourly ones. There is equipment that continuously controls and monitors releases, which, in case any increased value is registered, ensures that the necessary measures are taken. Additionally, in accordance with the safety requirements, the monitoring equipment is ensured with a double or even triple redundancy. Thus, all releases are monitored by several types of equipment the measurement accuracy of which is regularly checked by means of laboratory methods. In this sense, Kozloduy NPP prepares monthly reports for the releases to the environment and at the end of each year a detailed annual report is issued. These reports contain a detailed analysis of the type and the cause for the release, and the impact on the environment and public. **With regards to the statement that there could not exist any admissible release levels, this is a personal position.** The dose limits due to ionizing radiation adopted by the IAEA and reflected in the regulations of the Republic of Bulgaria are scientifically justified and proposed by the ICRP. **With regard to the requirements for determining the release limits, Ms. Simeonova constantly quoted the letter of the Mayor of Kozloduy, Mr. Manoev.** Mr. Manoev raised some questions and requirements during the consultations for the preparation of Terms of Reference for the scope and content of the EIA-R. This has been taken into account and reflected in the EIA-R. **Regarding the claim of Ms. Simeonova that the people of Dabuleni and Bechet have never been aware of a potential evacuation plan in case something happens in the Kozloduy NPP:** Each country is required to have a National Emergency Response Plan the implementation of which will start in case of an accident; the same way that each municipality shall also have such a plan. Emergency response planning and the organisation of emergency response in the Republic of Romania have been described in the 6-th National Report on the Convention on Nuclear Safety, issued in 2013.

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		We cannot say that there will be no negative impact from the construction of one such unit 7. I will quote one more part of the EIA-R, Folder 1, Chapter 1, p.44-97: "The existence of such quantity of SNF on the site of KNPP represents a long-term problem, as it is a deferred solution that transfers responsibility to future generations." As I said last time, in Bulgaria, same as Romania, it depends who is in power – when the pro-Russian governors come, they want a Russian reactor; when the pro-westerns come, as now, they want an American reactor. We should all know that it does not matter from what plant the reactor is – Russian, American, or Canadian. I also say this for Cernavoda, our opinion is the same. This unit is similarly harmful for the person and their health for millions of years. We have a proverb in Bulgaria – whoever pays, he orders the music. Of course, there is no seismic problem and that the site is extremely stable. This is probably true. Let us not forget that 10-km away from the former planned plant Belene, 122 people from Svishtov lost their lives on 4 March 1977 after an earthquake. Reply by Mrs Simeonova: I can see that the highly waged experts jumped on me. We have made excellent round tables together, and will continue to do so, as there should be discussion in society. When the word was given for questions, it said questions, comments, statements. I only quoted the report that you wrote. You can write it in any language, but the people in Dabuleni do not know about evacuation plans – I spoke to farmers and this is recorded. You may have evacuated Bechet, but the people in Dabuleni did not know about it. I probably seem like a redneck bio-producer from a deserted village. I graduated in ecology from the Sofia University and specialised in Environmental Management at Berkley University. I have come here, because I am sure that society must decide whether to have this additional unit or no. The Romanians probably do not know that we are spending less than half of the installed capacity in Bulgaria.	The Republic of Romania has developed a National Emergency Response Plan for a nuclear accident; it includes the action plans during a general radiation accident at Cherna Voda NPP, and in case of impact from KNPP. Moreover, regarding the Cherna Voda NPP surrounding area, three emergency planning zones for nuclear risk have been identified: - zone of impact from KNPP; - zone of impact from the research reactor VVR-S in Bucharest - Magurele; - zone of impact from the research reactor TRIGA at Pitesti - Mioveni. For each of these three nuclear risk zones, local authorities (of the districts) plans have been developed for intervention in case of a nuclear accident. The district radiation accident response plans have been approved by IGSU - the chief inspectorate for emergency situations in Romania. External organisations have been identified together with their responsibilities during a nuclear facility accident that may result in impacts outside the site of each of the nuclear power plants. The main response steps have been defined for the external organisations, together with the intervention level for implementing protective measures for the public in each of the emergency response planning zones. The external emergency response plan of Romania identifies all the responsibilities, the methods and means of informing the public in the accident affected areas, as well as notifying the regulator and other responsible government and local authorities. In April 2011, an international emergency response drill, NAUTILUS 2011, was conducted, with participants from IAEA. In the framework of this drill, the necessary protective actions were performed for the towns of Oryahovo and Bechet. High-ranking persons from Romania attended the activities in Oryahovo as well. The drill in Bechet included evacuation

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		In Germany, there are 4,500 bio-gas installations from agricultural facilities. 96,000 working places have been created. Bulgaria and Romania are agricultural countries. God created this heaven for tourism and agriculture and with these installations, there is no need for evacuation plans, to have dose-meters and for people to worry whether it will explode or not.	of part of the population, and distribution of personal protection equipment. Participants from both towns demonstrated good knowledge of the emergency response plans during the drill. In addition, the web-site of Kozloduy NPP provides information in a brochure, in Bulgarian, Romanian and English, for the initial actions that have to be taken in the event of a radiological accident, which describe the most significant things that everyone should take up in case of such an emergency. **See also our comments on the statement of Ms. Simeonova – item 12 from Dabuleni**