

Questions and responses – Craiova, Dolj County, Romania 19.11.2014

No.	Name/Organisation	Question	Answer of the Bulgarian Representation
1.	Marcel Radut, Pro Democratia Association, Craiova	<p>I would like to express dissatisfaction and surprise for not receiving full information from the Bulgarian side. The Bulgarian side did not inform the Romanian public for the agreement with Westinghouse LLC. This is a concern since, softly put, they have been in controversial situations in the nuclear field and they offers to sell reactor AP-1000, for which errors in design have been established. I would like to say that from medical point of view of the health of the Romanian citizens in this area of Romania, this is not sufficiently good for us to say “yes” to this project. Only in the regional oncology hospital in Craiova, there have been 1000 cases of kids suffering from cancer so far. Monthly, around 10 people are suspected to have cancer. We would like to express our belief that these public debates are just formal events. Pro Democratia will require from the Romanian authorities to carry a referendum at the regional level in the near-Danube municipalities that are affected by the operation of KNPP, so that the citizens of these areas can express their opinion on the realisation and continued operations. We would like to put forward the following questions to the Bulgarian side:</p>	
1.1	Marcel Radut, Pro Democratia Association, Craiova	<p>Is it true that there have been 3 incidents/problems in the operations of KNPP in the period 2011-2013?</p>	<p>The short answer is “no” and to make it clear, I would like to point out that to define an event, there is an international scale to define the level of impact of an event on the nuclear safety and protection. The scale is called INES – International Nuclear and Radiological Event Scale. It was developed in 1990 in order to unify all reported events from nuclear power plants and other sources of ionizing radiation.</p>

Comment: The question was incidents and/or problems:

Mr Radut: Not entirely.

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

Specifically for the period, there have been no incidents. Under this scale an incident is considered an event of level 2 and above.

KNPP and every other nuclear plant reports events to the regulatory body. This is first assessed by the plant itself preliminary and the regulatory body evaluates whether the assessment is correct and it may give its own assessment. This is reported yearly to the International Agency (IAEA) and every two years the nuclear safety is reviewed against the convention on nuclear safety. For this year, there have been 4 reported events, all of which have been assessed as Level 0 – i.e. under-scale or no-safety significant. In the recent years we have not even had Level 1. According to the INES scale, this is an anomaly. Will this answer be satisfactory?

Moderator: If the answer is not sufficiently satisfactory for the representative of the Association, we recommend you to send all your questions in a written form to the MECC by e-mail. There have been indicated several e-mail addresses from the central authority and with carbon copy to LEPA Dolj.

A procedural question was put forward from the Bulgarian party: We have gathered to discuss the construction of a new nuclear unit. Units 5 and 6 are not subject to this discussion. We are not inquiring about Cernavoda NPP. I believe we should focus on the subject of this discussion, which would be the questions on Unit 7.

		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.	
1.2.	Marcel Radut, Pro Democratia Association, Craiova	Is it true that in August 2014 an agreement has been concluded between the Bulgarian side and Westinghouse for investment and what does this agreement represent?	<p>The topic is not relevant to the EIA procedure and I want this statement to be included in the Minutes of this public debate.</p> <p>Specifically for the question – yes, such a preliminary shareholders’ agreement was concluded and this has been published in the Bulgarian and foreign media. I should point out one detail, that this agreement had to be approved by the next Bulgarian government. For this reason at the moment, this is not a fact and there has been no decision for constructing a new nuclear unit by the Government per se.</p> <p>The answer was considered to be satisfactory.</p>
1.3.	Marcel Radut, Pro Democratia Association, Craiova	Is it true that the NPP is located in a seismic zone and can be affected by earthquake with epicenter in Vrancea?	<p>The answer to this question was given in the presentation on the EIA report. As the presentation confirms, the location of KNPP is located in the least seismic (also aseismic) area of Southeast Europe. The left part of the slide shows the historic seismic activity of earthquakes of larger scale and you can see for yourself that there have been no earthquakes in proximity of the plant. The figure on the right side with the latest data until 2012, shows that there is a much lower seismic activity of earthquake activity or is missing in the local and sub-regional area (30-km area).</p> <p>I would like to once again underline that as already mentioned, we are discussing the EIA report, which is the main preventive instrument that guarantees the fact that the impact on the environment is made at the earliest possible stage.</p> <p>As per the licensing procedure, next stage is the specific study, analysis and evaluation of the selection</p>

		<p>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 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.</p>	<p>of the site, which includes quantitative analysis of the seismic risk.</p> <p>I would like to ensure that such analysis has been made and submitted in 2014 with the newest data, which is currently being verified by independent sources and I would like to underline that they confirm the data that has been known up to now with regards to seismic risk.</p> <p>That the data up to now that comes on seismic risk, such as seismic risk of facilities and equipment, have been well evaluated and assessed, is also confirmed that for 40 years, the plant has been working without major or high level incidents.</p> <p>I should add that the seismic characteristics included in the EIA-R have been verified multiple times by the International Nuclear Energy Agency, with the last two checks from 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 has been established that the project seismic characteristics are within the requested normative values with a significant margin. As I mentioned, studies for existence of local faults were carried out in the local region. Such faults have not been found in the 30-km sub-regional area, and the 5-km sub-local area.</p> <p>For Vrancea focal points, it is 320 km to the North-East of Kozloduy and Cernavoda NPP is 180 km away.</p>
1.4.	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?	<p>Once again I want to mention that this question has no relevance to the EIA procedure and want this to be part of the minutes.</p> <p>To the question – yes, we are following all news regarding the projects of Westinghouse, including AP-1000, as well as all other nuclear projects of interest to us. Yes, we see that there have been such</p>

		<p>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.</p>	<p>technical observations made, but none that are related to the safety design. It is normal that each project designed for the first time to go through this early stage.</p>
1.5.	<p>Marcel Radut, Pro Democratia Association, Craiova Club</p>	<p>Is it true that the Bulgarian citizens boycotted the national referendum that was organised a while ago for use of nuclear energy in Bulgaria?</p>	<p>This question concerns sociological aspects not related to the EIA procedure and I ask for this to be part of the minutes.</p> <p>Still, in order not to be accused of lack of transparency, I will reply. The Bulgarian referendum legislation is highly restrictive, in a sense that the Regulator has defined that in order to have a legitimate referendum, at least as many voters as in the last parliamentary elections. This means that the referendum determined for the Nuclear Energy had to include at least 4.3 million Bulgarian citizens. The question was formulated as follows: “Should Nuclear Energy be developed in Bulgaria through building 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. We have no reason to believe that it 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 as required).</p> <p>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. That is to say, the referendum was unsuccessful due to low turn-out,</p>

		<p>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.</p>	<p>but it showed undoubtedly, that society expects the development of Nuclear energy.</p>
1.6.	<p>Marcel Radut, Pro Democratia Association, Craiova Club</p>	<p>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?</p>	<p>In Bulgaria, compared to other European countries, Greenpeace is not as active, but it has used different occasions to express its position against all nuclear projects, not only in Bulgaria. Bulgarian ecological organisations received full access to the project documentation, that is the EIA-R and were given floor to express their opinion during the public debate in Kozloduy. None of these organisations has been stopped from expressing its position. During the whole process of preparation of the public debates in Bulgaria, the Contracting Authority has ensured the transparency of the project by broadcasting advertisements of the debates in the local radio stations and TVs, a month before the first debate, also on the two websites of the investor and the KNPP, where invitations were published for the public debate. What is more, the company met with the mayors of all five municipalities and invited them to participate in the meetings.</p> <p>We are seeing a constant attempt to imply to the public that the procedure is covered in secrecy and is not transparent. After our public debates, there were more than 100 publications in the press that were devoted to the debates.</p> <p>You also asked in this last, 6th question, whether the Employer respects the protests – of course it does, as it is ready to hear all points of view.</p>

			<p>The moderator, seeing Mr Radut leave, said that the requests for detailed clarifications will be sent to the Bulgarian Party, who will send us information with the answers regarding your questions.</p>
2.	<p>Violeta Ciuciuc, NGO Asociatia Dabuleni Impreuna pentru Viitor, Dabuleni</p>	<p>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?</p> <p>Mrs Ciuciuc: If three types of bird species get extinct, what would you do?</p>	<p>So far, only the thermal impact is assessed and different organisms react differently. Some react positively, some react with decreasing the area of distribution. If we establish negative impact on more target species of importance for Europe, we would take restrictive measures – i.e. additional purification, or something in this direction, as long as its impact is effective.</p> <p>We cannot even think of radioactive contamination since all the data (monitoring and other) indicate that such contamination is not possible and cannot have any impact on any of the species. If you have a more specific question rather than imagining the future, we could consider a specific type of situation.</p> <p>Answer: We can imagine that three types of birds will disappear – but for what reasons, what factors are there for their extinction? In the 40-year history of KNPP and in the assessment for the new nuclear unit (NNU), it is seen that there are no such reasons. This is why, as rich as our imagination, we cannot imagine that because of KNPP and the NNU, under normal operation, there would be birds, or other species, that would become extinct. 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 beach area of Bistret, increase of a world endangered species has been observed – of the <i>Pelicanus Crispus</i>. This is an</p>

			example that the thermal impact is not only with negative direction, but it may have positive impact.
2.2.	Violeta Ciuciuc, NGO Asociatia Dabuleni Impreuna pentru Viitor, Dabuleni	On a world-wide scale, governments are speaking ever more of closing down nuclear energy and replacing it with renewable energy (green energy) – what do you think of using such other alternative energy sources?	<p>We are following all world tendencies and on an international scale we are observing an increase of the share of renewable energy, indeed. The main reason is that technology there develops quickly, e.g. the solar panels now have decreasing price, which makes them accessible. Same applies to wind power generators and their share in the energy mix increases, including Bulgarian. This does not concern nuclear operators, since in every country it is a matter of constructing a balanced energy mix. In the energy sector it is all about base capacities which are not influenced by the wind power or sunlight. This means that these power plants generate 24 hours a day the same certain power. Bulgaria achieved its target from the Europe 2020 strategy and in this aspect we can compare to the most developed countries in the EU. Only Germany are giving up nuclear energy. In 1986 there is only another such example where Italy decided to stop developing its nuclear energy sector. Poland currently develops its nuclear energy programme. Turkey intends to construct 3 NNU. Japan is slowly going back to nuclear energy since they overestimated their capabilities to substitute nuclear energy completely. Some other countries import nuclear energy, e.g. Austria.</p> <p>I would like to remind you that the Europe 2020 strategy explicitly mentions the increase of the nuclear energy share, taking into account the greenhouse gasses and the bad condition mentioned in the fifth report of the International Committee on Climate Change. The initial enthusiasm from the wind-generation power plants showed a very negative impact on bird species. The photo-voltaic power plants take a big part of usable agricultural</p>

		<p>Comment by Ciuciuk: Am I right to understand that according to the professor, there are more negative impacts from renewable sources of energy, than from nuclear energy?</p>	<p>lands which leads to many negative effects, for which they are a panacea. The safety systems of a NPP, their experience all minimise negative impact on the environment.</p> <p>Response: Yes, this is what appears to be the reality.</p> <p>The answer was considered satisfactory.</p>
2.3	<p>Violeta Ciuciuk, NGO Asociatia Dabuleni Impreuna pentru Viitor, Dabuleni</p>	<p>The next question is put forward to Mrs Cojocaru from the Romanian side. I would like to know her opinion as a specialist in the laboratories in Craiova and Bechet, with regards to the effects of the new reactor for these areas in Romania?</p> <p>Violeta Ciuciuk requested a clarification: With regards to the formulation that is in all presentation of</p>	<p>The representative of the LEPA Dolj answered the question.</p> <p>The monitoring stations for radioactivity in the regions, which have been functioning since 1963 and the station in Bechet since 1987, are under the authority of the LEPA Dolj and the most important activity they do is to monitor and follow the radioactivity in the region. The LEPA Dolj has expressed its statement with regards to the EIA-R – it sent it to the MECC, which on its part sent it to the Bulgarian MOEW. The opinion expressed is within our competencies and responsibility for monitoring radioactivity. We requested form the Bulgarian party to initiate an exchange of information between the two countries, so as to ensure more transparency with regards to environmental monitoring and to prepare a report containing data that is available for the population of the regions in proximity. At the same time, I would like to underline the fact that LEPA Dolj has contributed to the preparation of this Report, as the Bulgarian party requested data from our work that we have, and we have provided them and they are part of the report.</p>

		<p>the experts – what is understood by them by the phrase “No Trans-boundary impact expected”? Because to me it seems that this suggests there are some risks to the Bulgarian party, but none to the Romanian.</p>	<p>Answer: This is an expression that is accepted in the procedure for preparing the EIA-R, as we are assessing possible and expected impacts at a regional level around the facility and the sole fact that we are so close as neighbours, only separated by a river, and that we were yesterday in Dabuleni and today in Craiova, makes us think whether these minimal local impacts are reflected on the scale of evaluation and whether they can reach our neighbours. In principle, this is the expression – whether there is, albeit minimum, possibility for minimal impact to reach Romania. We have based this assessment mainly on the very detailed monitoring performed by the NPP, on the very serious monitoring control of the national institutions, including the Health Authorities, and thus the lack of assessable impact in all national levels, suggests the lack of trans-boundary impact as well.</p> <p>The answered was considered satisfactory.</p>
2.4	<p>Violeta Ciuciuc, NGO Asociatia Dabuleni Impreuna pentru Viitor, Dabuleni</p>	<p>I would like to know whether these public debates are consultations with the Romanian party, or represent informative meetings with the Romanian party? What would happen if the citizens in proximity to Kozloduy do not agree with the construction of the unit?</p> <p>Mrs Ciuciuc asked: Is this to say that this is an informative meeting?</p>	<p>The Bulgarian party suggested that Mrs Osiceanu reply to the answer, who in turn transferred the answer back to the Bulgarian side.</p> <p>The Bulgarian representatives replied. The answer should be in the direction that we are in a trans-boundary procedure for the EIA. Of course, we are here as Contracting Authorities and for the experts to answer such questions. After the public debates held in Romania, all of these questions, notes, etc. are given to the Bulgarian party and will be reviewed in detail. After all, we are legislative sides from the two countries and we act in accordance with the rules of the EU.</p>

		<p>Mrs Ciuciuc: One more clarification – I would like to ask, can we, as citizens of Daubleni, Bechet, etc., organise a referendum such as the one in Kozloduy, as we are potentially impacted parties?</p>	<p>Mrs Osiceanu requested to make a clarification. She said that this is meeting the ESPOO convention requirements according to which all signatories. If any country initiates an Investment Proposal which might have impact on the environment should inform the potentially impacted country. Therefore the consultations on the investment proposal, which represent these public debates, per request of the country that may be impacted, are the situation that we currently at.</p> <p>Mrs Osiceanu answered: There are legislative requirements in order to hold a referendum – i.e. there must be a request, from a defined number of people that they would like to request a referendum. If you were paying attention to when the Pro Democratia representative put forward the questions, and in his statement, he also spoke on this matter. Within our obligations, the Ministry is obliged to respect the national and international regulations, as well as all regulations that we have signed in the field of environment.</p> <p>The answer was considered satisfactory.</p>
2.5.	Violeta Ciuciuc, NGO Asociatia Dabuleni Impreuna pentru Viitor, Dabuleni	What are the dates for the Kozloduy NPP days of open doors?	<p>The days for open doors are usually organised twice a year – in the spring and in the autumn. These are published in advance (at least a month in advance) on the website of the NPP and there is no restriction on access, so citizens of other countries may also visit. We have had visitors from Australia, so I am taking this opportunity to invite you. The next open doors day will most probably be in the spring of next year (2015).</p> <p>The answer was considered satisfactory.</p>
3.1	Nicolae Boteanu	I believe that these public debates are held exactly to clarify certain questions. Of course, Nuclear Energy	One of the main advantages of the new generation reactors that we are considering as potential

		<p>policy targets to improve the energy situation in each country. There is a dispute between nuclear and renewable energy and this is the reason why the recommendations regarding nuclear safety refer to certain risk that we undertake in case of construction of a nuclear power plant. From this point of view, from nuclear safety point of view, I would like to ask – in case of incidents, and I mean shutdown of energy supply, lack of water for cooling, etc., a heavy accident, what would be the potential impact on the environment and whether you have performed studies, i.e. do you have scenarios for such cases?</p> <p>Nicolae Boteanu: This is a sufficient reply, I appreciate one such project and such preventive measures. When the Fukushima event happened, it was precisely because such supplementary measures could not be taken and in the end, they could not cope with the emergency situation.</p>	<p>possibilities for the construction of the new units is precisely that they have built in technical systems for dealing with such situations. Westinghouse LLC guarantees that in case of lack of off-site power supply, cooling liquid, their AP-1000 design is safe for three days (72 hours). With minimum corrective actions, the safety parameters may be ensured for 7 days (168 hours). What we mean by minimum supplementary activities, we mean for example a small diesel generator or a fire pump that can be used to fill certain tanks (reservoirs). The safety is achieved by using passive safety systems, using the principle of earth gravity, or the expansion of previously compressed gasses. In this sense the Westinghouse LLC design is really different from what other companies offer on the market. The Russian projects also have built in passive systems that, without the need for off-site power supply or cooling water, may sustain the system in a safe state. These are some of the aspects that distinguish the new generation reactors from the older one. In this sense, the designers have thought about what they can do in this specific area.</p> <p>Answer: Precisely, and this is why both American and Russian generations have a built-in ability to not need additional measures for 3-7 days, which is considered sufficient time to ensure any additional needed measures.</p> <p>The answer was considered satisfactory.</p>
3.2.	Nicolae Boteanu	Regarding the type of fuel that you consider using and what are the procedures and ways to store the spent nuclear fuel (SNF)? We usually say that producing nuclear energy is a “clean” production, but this is not entirely true, because the SNF may pose serious	You are right to assume that SNF management is one of the major issues to consider. This question is considered in the EIA report. The normal practice for this type of reactors is that the fuel that is changed during reload is placed in a so called Spent Fuel Pool.

problems and have major implications on the environment?

Additional question: This “may be stored” or “are” stored – i.e. are there already such facilities built?

The fuel must reside there for at least three years, so that the residual decay heat can be eliminated. Afterwards, this fuel may be managed in a few possible ways. Just to mention that the capacity of the considered spent fuel pool ensures storage for a period between 10 and 15 years. As of this moment, the most widely accepted practice is that the SNF is placed in casks for the so called “Dry Storage”. The Dry Storage Facilities may be organised in a building specially constructed for this purpose and in Europe this is how it is mostly done, or they may be simply placed in especially built site.

When performing Safety Analyses, not only the fuel that is currently inside the reactor is analysed, but also the fuel that is being kept at this pool.

Answer: In the presentation it was mentioned that there is a Dry Spent Fuel Storage Facility (DSFSF) located at the KNPP site for dry storage of fuel from the decommissioned Units 1-4. What is more we have SFSF for under water storage where fuel from Units 5-6 is stored. The possible future use of these facilities for the NNU can only happen after certain Safety Analyses are performed. In any case I can say that the Under Water SFSF shall not be used. To answer the first part of the question – what is the type of fuel used: each of the vendors of the considered reactors offers a respective type for their reactor. As of the moment, we do not have any contracts signed, we do not yet have a contract for the supply of fuel and at this stage a specific answer to this question may not be given. The EIA report reviews potential types of fuel, which may be used for these reactors.

			The answer was considered satisfactory.
4.1	Boriana Hrisimova, Political Party (PP) "Zelenite"	<p>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.</p> <p>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</p>	

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. 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. 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?

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. 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? 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? The so called fly-ash and bottom ash?

Lastly, I would like to remind the citizens of Craiova once more that if today they say “no”, there will be no nuclear unit.

How many direct victims would there be in case of an incident, according to the simulations that the experts claim to have made?

Bulgarian Moderator: The statement sounded more like a speech. You are comparing nuclear plants to nuclear bombs and, in my opinion, are underestimating the intellect of our experts and what is more, we have the pleasure to be in a country that has also chosen to develop nuclear energy. Even the children in 6th grade know that there is a huge difference between a nuclear unit and a nuclear bomb.

Answer: According to the Bulgarian legislation, the EIA is made on basis of normal operation conditions. All risk analyses are made afterwards and they are subject to special, additional reports. I remind you that we are making an Environmental Impact Assessment of the Investment Proposal, in order to see the potential impact, if any, at the earliest stage. Additionally, the procedure in trans-boundary context of the ESPOO convention means that we have to introduce the Romanian public, as potentially impacted neighbour, to our assessments. And if the respective institutions in Romania decide that these have not been performed well, this will be reflected towards our competent institutions, which will eventually decide the destiny of this EIA. Our public debate is under the Aarhus convention, which means that the public must be informed. In this sense, what you are implying in a foreign country, that a negative opinion of the local population on a project of national importance is, to say the least, and not use a strong word – you are lying to the local population.

		<p>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.</p>	<p>All of these questions were discussed in the debates in Bulgaria, and were given very precise answers, and in case these have been forgotten, they are still on the website of KNPP, so that there is no need to concern the Romanian party with purely Bulgarian issues.</p> <p>The Romanian moderator noted: Your opinion must be presented in first place to the Competent Authority of your country and to the NPP as the project developer. As far as I know, there have already been public debates in Bulgaria and, not last, I believe that the competent body for this is the Bulgarian MOEW, which will have the last word in this EIA procedure. The Romanian side, as part of the ESPOO convention signing country, requested from the Bulgarian party, precisely because of this possibility for impact from this project, to organise three public debates in Dabuleni, Craiova, and Bucharest.</p> <p>Mrs Hrisimova was not satisfied by the response.</p>
4.2.	Boriana Hrisimova, Political Party (PP) “Zelenite”	<p>What is the price of Uranium at the moment?</p> <p>Reply: You are trying to say that the economic questions have no place at this debate.</p> <p>Reply: When will we be able to discuss the economic question of this investment proposal?</p>	<p>We have gathered to discuss issues related to EIA and not political and economic issues. Please note this in the Minutes.</p> <p>Answer: Exactly</p> <p>Answer: Had you read the Bulgarian legislation, you would know that as per decision of the Council of Ministers, the Minister of Energy holds public</p>

Reply: 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. 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. How many victims would there be?

debates on all of those issues – including economic, social-economic, and safety. One of the conditions to make such a decision is the decision on the EIA. So let us please not confuse the two procedures.

Answer: There results from the modelling may be found in the report and the experts may comment. Safety of every NPP is rooted not only in avoiding the occurrence of events, but if they occur, they must be managed. If they cannot be managed, the impact on environment and people should be mitigated. This is the so called deep echeloned protection of NPPs. You were shown in the presentation the measures for Severe Accidents Management, regardless of the origin of the design. The worst case scenario has been foreseen in the new designs. You were answered to this question. One cannot speak of number of victims. You did not mention the number of people in the airplane; this is the actual number of total victims. In every NPP, regardless of how well it is designed, the Emergency Plan is developed. So regardless of what we calculated and modelled, we must be prepared to manage the consequences. Such Emergency Plan is in force in KNPP and every other NPP. In all types of manufacturing sectors there are such Emergency Plans. Such plans are developed by municipalities as well and in none of these plans would you understand the number of victims. The Emergency Plan envisages measures for mitigation of consequences. We cannot seriously answer such question. As a comparison I will mention the three accidents in the world: Three Mile Island – no victims; Chernobyl – 37 direct victims (mainly firemen and operators); Fukushima – no direct victims (2 because of tsunami).

			<p>The moderator invited Mrs Hrisimova to restate her remaining questions, but she refrained from doing so.</p> <p>The answer was not considered satisfactory.</p>
5.	Sandu Florin Tudor, NGO Terra Millenium III	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?	<p>In Bulgaria, there have been stress-tests, similarly to all other European countries, after the Fukushima accident.</p> <p>To answer the question – yes, there have been such estimates made. As required by the European Commission for the operators of nuclear power plants, requirements have been given in case of hypothetical accident, such that is not possible otherwise, that only small quantity of radioactivity is released in the environment. As already shown in the presentations, beyond more than 800 meters of the nuclear facility, there would be no need to take any measures for the protection of the personnel. One more thing that I would like to mention is that there are such emergency areas around the nuclear plants, where it is forbidden to build schools, or for people to live. Such zones exist around each plant and there is such one around KNPP, an area of protection measures of 2 km. This means that there is no population in this area.</p> <p>All safety measures for the workers on the site have been provisioned. There are safety equipment and facilities provided, KI tablets, protective wear, numbering 1.5 times the personnel of the plant. In case of an event, the first and foremost thing to get to a major accident is that there are many hours before it comes. As per Bulgarian legislation and International conventions, the operator (station shift supervisor) of the plant is obliged in case of such an event, to activate the emergency plan within 15 minutes of it appearing. We have also a warning</p>

		<p>Reply: 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?</p> <p>Reply: This is relatively satisfactory as a response. My question was – in case of a nuclear incident, will the radiation reach the delta of the Danube.</p>	<p>system in the 30-km area around the plant that, per legislation, we have to activate within 1 hour and to warn the population and propose safety measures to them.</p> <p>Answer: Within the 30-km range, there are Natura 2000 protected areas, 4 in Bulgaria and 4 in Romania, as well as 1 protected area that is Danube Island – Ibisa, and all of them have been assessed with regards to biodiversity. On the Romanian territory, local studies have been made with the help of Romanian specialists. Additionally, we have made extra measurements of the radioactivity with dosimeters in the Natura 2000 protected areas and we can show on the presentation all points of such measurements which were performed by us. The absorbed gamma dose rate values measured in the protected areas are lower than the absorbed gamma dose rate values from the natural background and this is confirmed by the radiological monitoring performed by KNPP. The only impact that was established was the thermal impact, which is within the acceptable levels, from the influx of the Hot Channel (HC) in the Danube. It impacts only, and negligibly so, a Bulgarian protected area – island Kozloduy, in its east most part, without reaching the Romanian shore.</p> <p>Answer: The scope of our assessment is the 30-km area, according to the national and international legislation and the EIA procedure requires us to make an assessment in the case of construction, normal operation and decommissioning of the nuclear unit.</p>
6.	Albena Simeonova, “Anti-Nuclear” Coalition	Mrs Albena Simeonova was given floor to make her requested statement on the project, however she refrained from expressing her statement.	

<p>7. Mrs Luminita Simoiu, Chemistry Faculty, Craiova University</p>	<p>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 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</p>	
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8.	<p>Aurora Reiss, Chemistry Department, University of Craiova</p>	<p>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 power plant has two large problems, or this is at least my opinion: the first problem is related to the RAW storage facilities and the second is related to nuclear accidents. 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.</p> <p>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?</p>	<p>From what was understood, this is a case similar to what happened in Chernobyl. It is wrong to compare the Chernobyl reactor to the types of reactors that are installed in Kozloduy, in the first place because the Chernobyl reactors had no power limit and the incident happens precisely in the moment when they were trying to understand what the limit of the reactors is. This is when the uncontrollable chain reaction happened, which leads to the release of a very large radioactive cloud in the atmosphere and, afterwards affected Romania and Bulgaria. The reactors in Kozloduy are of a completely different type. They have a maximum capacity, which cannot be exceeded.</p> <p>If we understood correctly, what would happen if an incontrollable chain reaction occurred in the new unit, analogical to the accident in Chernobyl? What is typical for the pressure water reactor type is that in case of increasing power, the process suppresses the power on its own, i.e. it is self-contained. The higher the temperature rises, the more it supresses the chain reaction, which was not the case in the Chernobyl reactor.</p> <p>In the safety analysis reports (SARs) for every type of reactor, the ability of the reactor to work in all type of scenarios is provided – in design based conditions & beyond design based conditions. They even provide for the possibility that the emergency protection system fails to work as intended. Only</p>

			<p>after such specifications, can a unit be operated. In this sense, the possibility for such types of emergencies – criticality related accidents, considers the safety to be ensured.</p> <p>Regardless of everything that is foreseen in the SARs, for the NNU it is foreseen even in the event of Severe Accident all radioactive substances to be contained in the containment so that nothing is discharged in the environment.</p>
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