

Translation from Bulgarian

REPUBLIC OF BULGARIA
MINISTRY OF ENVIRONMENT AND WATER

DECISION
ON ENVIRONMENTAL IMPACT EVALUATION
№ 1-1/2015

Pursuant to Article 99, paragraph 2 of the Environmental Protection Act, Article 19, paragraph 1 of the Ordinance on the conditions and procedures for environmental impact evaluation (EIA Regulation) and in conjunction with Article 31 of the Biological Diversity Act and Article 39, paragraph 12 and 13 of the Ordinance on the conditions and procedures for evaluation the compatibility of plans, programs, projects and investment proposals with the object and purpose of conserving protected areas (Ordinance on the environment)

A P P R O V E

Implementation of the investment project "Construction of new nuclear power of the latest generation of NPP, Kozloduy" of Site 2

Client: "NPP Kozloduy new capacities" EAD

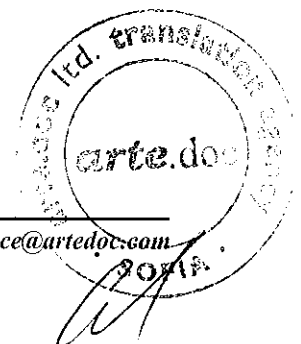
Seat: Kozloduy 3321

Brief description of investment proposal:

Investment proposal (IP) is to build a new nuclear power facility of new generation (Generation III or III+) with installed capacity of 1200 MW. Nuclear power facility is designed in accordance to the requirements of European organizations operating NPPs with light water reactors and Bulgarian legislation in the field of nuclear energy. The site is planned to be situated next to NPP "Kozloduy", which is located on the right bank (of the 694th km) of the Danube River. It is 3.7 km south of the midstream of the river and the state border with Romania. The distance in straight line is about 120 km north and along the national road network of about 200 km from the capital - Sofia. It is located in the northern part of the first flooded terrace of the Danube River (elevation 35.0 tons Baltic altitude system) and has an area of 4471.712 acres.

There are four alternative by location sites proposed as follows:

- **site 1** - The site is located northeast of units 1 and 2 of NPP "Kozloduy" between open switch yard (OSY) and "Valyata" area near the built hot and cold channels - north of them. The total area is about 55 ha.
- **site 2** - The site is located east of units 1 and 2 of NPP "Kozloduy" in the direction of Harlets village, built south of hot and cold channels. The total area is about 55 ha.



- **site 3** - The site is located northwest of units 5 and 6 of NPP "Kozloduy", near the circular road of the existing plant. The total area is about 53 ha.
- **site 4** - The site is located west of units 3 and 4 of NPP "Kozloduy" and repository for spent nuclear fuel (RSFS) south of the cold and warm channels. Available area is about 21 ha, within the expropriated land of NPP "Kozloduy".

None of the sites affect forests.

Within the area of the proposed sites all the main and auxiliary buildings and facilities, equipment necessary for the operation, and all local treatment facilities and wastewater treatment plants will be located. Site of installation of new nuclear power facility (NNU) will be fenced and secured in accordance with the Regulation to ensure the physical protection of nuclear facilities, nuclear material and radioactive substances (published in SG 44 of 09.05.2008) and will establish a protected area in accordance with the requirements of Regulation for emergency planning and emergency preparedness in nuclear and radiological emergency (published in SG 94 of 29.11.2011) will be established zone precautionary measures (PM) and an area for urgent protective measures (AUPM).

Temporary sites related to storage of bulk materials, finished steel, concrete and reinforced concrete, metal, etc., components, fuel and lubricants, temporary offices, temporary dwellings for accommodation of resident workers, temporary social - living and health centres, water supply network and draining of living faecal waste water for purification and facilities for disposal of rainwater and water draining system for groundwater are organized there. Each of alternative sites is large enough for the construction site. Vertical landscaping of the site is consistent with operational elevation of the current site of the plant, which is 35.00 m under SS. This is determined by the fact that the facilities associated with the existing cold channel (CC) and hot channel (HC). All sites have adequate technical capacity to supply potable water from the existing water supply system of the plant, as well as to provide the necessary approach to road transport by deviations from the existing road infrastructure.

Connection to the electricity system of the country will be achieved by a separate 400 kV OHT line to 400 kV switchyard of NPP "Kozloduy", which is currently connected to the electricity system with eight 400 kV power lines (two of which are interconnectors) and one 400/220 kV single-coil transformer. The backup power for their own needs will be realized by one 220 kV OH line from 220 kV switchyard of NPP "Kozloduy". The built backup power supply shall provide less disruption to the normal operation of the reactor in any external or internal failure of the mains. Heat removing system and important for the operation of power consumers shall be supplied from two different sources (own generator and electricity network system). Spare sources shall be used in normal and emergency modes, as well as in emergency conditions in case of partial or complete loss of working power. Power supply of systems important to nuclear safety systems are provided with uninterruptible power supply. Emergency systems will be switched on automatically by connecting to the emergency power supply source and/or batteries.



Facilities, ensuring technical water supply with fresh water from the Danube River and taking the hot process water away are provided at the site.

Three basic technical and layout solutions for reactor installations of the newest generation (Generation III or III +) are proposed for the IP implementation: alternative A1 (Hybrid - maximum use of the equipment of the nuclear island, ordered for NPP "Belene" (AES-92) and turbine island ordered to another supplier) and alternative A2 - including 2 models of entirely new design reactors - AES -2006 and AP-1000. Both options provide usage of power water-water reactors (PWR) of new generation (Generation III or III +) with installed capacity of 1200 MW, corresponding to the modern requirements for safe operation.

In the field of nuclear energy, units of III, respectively III + generation represent the current level of the best technology. These are the new projects of nuclear power plants that compared to older generations show better technological, economic performance and safety qualities.

Power plants of III-rd generation using the best available technology based on proven types of II-nd generation. Generation III + reactors have improved economy of operation, to which belongs the reactor (respectively power plant), subject of the project. AP-1000 reactor is Generation III + reactor pressure water with a thermal neutron moderator and light water coolant. Design operational life is 60 years.

Reactor AES-2006 is a water-water pressure reactor with a capacity of 1200 MW. This project is based on the project and the experience of the operation of reactors WWER -1000 and builds the project AES-92.

Models meet modern safety requirements. The safety features of AES-2006 have improved compared to plants AES-92. The nominal operational life of the plant is 60 years.

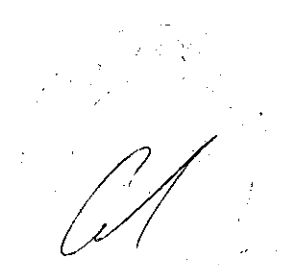
Each of the alternatives of nuclear unit provides spent fuel pool (SFP). In this type of pool fuel ages 3 to 5 years, after which it can be transported away from the facility. SFP provides location for the fuel assemblies during repair of units and storage of activated components under water.

In Bulgaria the Strategy provides storage of spent nuclear fuel (SNF) in intermediate storage as the preferred technology for dry storage. For the models considered technical possibilities of safe dry storage of spent fuel are provided. System for dry storage of spent fuel is dependent on the plant, regulatory requirements and technological developments.

The new nuclear power intended to be built in NPP "Kozloduy" is a high-tech energy plant for the production of electricity based on nuclear fuel process.

The parameters for the construction of such energy facility suggest two main sub-groups and facilities:

- nuclear - energy facilities and plants involved in the main process; electricity production, as well as those representing sources of radiation effects;
- other manufacturing sites and facilities engaged in supporting/accompanying processes important to provide basic nuclear energy process and/or representing sources of various types of non-radiation impacts on the environment.



The technology for production of electricity from nuclear source is a light water pressure reactor (type PWR - Pressurised Water Reactor), and the moderator and coolant is mild water.

Technological scheme of the new nuclear power is double loop and includes:

- Primary loop - a circulating radioactive environment, consisting of a power reactor, and circulation loops. Each loop includes a main circulation pump, steam generator and circulation pipes.

- Secondary loop - with non-radiation environment, including steam generating part of the steam generator, turbine and auxiliaries engine room.

Primary loop

The reactor is a pressure vessel comprising housing and an upper unit (head) of the reactor. The internal housing devices are located in the reactor vessel (e.g. active area shaft, neutron reflector etc.), and the drives of adjusting bodies are located in the head of the reactor.

Reactor power is controlled by control rods and rapid shutdown (emergency protection).

The steam generator is a pressure vessel with vertical or horizontal execution with distribution system of power and emergency feed water system of heating surface composed of pipes and steam collector. In a nuclear power plant with pressure water reactor (PWR) steam generator serves as a heat exchanger between the primary and secondary loops. The main circulation pump is vertical centrifugal single-stage pump with sealing unit shaft and asynchronous electric drive. Main circulation pumps provide the necessary circulation amount of coolant in the primary circuit according to the thermal power of the reactor at different operating modes.

The compensation system volume includes the volume compensator, relief tank, unit of relief valves and pipelines connecting individual facilities to related systems. The compensation system volume serves to maintain the pressure and limit pressure variations in the primary circuit and to protect against uncontrolled pressure increase in emergency regimes, and to provide a gradual increase and decrease of pressure in heating and cooling of the primary loop.

Auxiliary systems of the primary loop:

- *Complementing the primary circuit and maintenance of chemical regimes* - for long-term management of nuclear fission and maintain the required quality and quantity of coolant systems shall be installed to supplement and draining the coolant, and a system for processing the chemical composition of the cooler.
- *System of radioactive waste (RAW) processing* - provides processing of radioactive waste in gaseous, liquid or solid form.

Gaseous radioactive waste arose primarily from the continuous degassing of the refrigerant gas generated by radiolysis of water in the reactor or gaseous fission products. Gaseous radioactive waste pass through particulate filters, which keep dust particles (aerosols) and humidity, after which adsorption filters retain radioactive aerosols. Thus, the total radioactivity is brought in solid or liquid form, and the purified air is discharged through the vent tube. Liquid radioactive waste generated in the cleaning of the cooling primary loop decontamination of equipment and liquid filters, etc. The radioactive liquid is evaporated in special evaporating plants, and then condensed steam is filtered



alternately in mechanical and ion exchange filters. After satisfying the criteria for purified water in a controlled manner, it is released to watercourses. Spent ion exchange resins, and the concentrated residue from the evaporators may be put into solid form by means of fixation to another material (typically cement, bitumen or glass). Solid waste is separated, possibly fragmented and stored in steel drums.

Hardened and solid waste in steel drums are placed in concrete containers and then buried in a special repository.

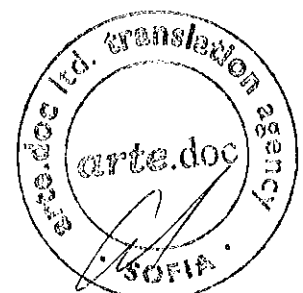
Liquid radioactive waste that will be generated during the operation of the power units of the primary circuit due to leakage from the equipment of facilities nonfading equipment for regeneration and washing of ion exchange filters, washing of special clothing and sanitary clearances, radiochemical laboratories and etc., will be processed on the site in accordance with the Regulation on the Safety Management of RAW.

Solid RAW, which will be generated are mainly of 1 and 2a category. According to the requirements of the EUR, during operation generated solid radioactive waste annually, including the conditioned liquid RAW, will not exceed 50 tons ³ 1000 MW of installed power. Management activities of RAW will be made on the basis of established administrative structures with defined status between the operator of New Nuclear Unit (NNU) and SE "RAW" by defined functions and tasks and a clear allocation of rights, obligations and responsibilities.

- *System for cooling and cleaning of the pool for fuel* - provides heat removal from the spent fuel during its long-term storage in the spent fuel pool during replacement of fuel in case of removal of the entire core of the reactor. The system maintains a sufficient level to protect staff from radioactive radiation from the fuel. Cleaning system ensures maintaining the required quality of cooling water. It consists of ion exchange filters.
- *Ventilation systems* - provide the necessary parameters of environment safety of staff and for the proper operation of the technological equipment during normal operation and emergency conditions.

Safety systems:

- *An emergency active zone cooling* - protects the active zone from heat damage. It acts as the primary system for emergency LOCA, which are accidents with loss of coolant from the primary loop. In these accidents supply of boron cooling water to the reactor is provided. A pool located in the containment with sufficient capacity for the purpose is used as a cooling water reservoir.
- *System for removal of residual heat* - takes the heat generated in nuclear reactors due to radioactive fission of products present in the fuel and additionally cools the reactor under normal operating conditions, abnormal conditions and design emergency conditions to maintain the tightness of the primary loop,
- *System for safe pressure reduction* - used for controlled lowering of primary pressure necessary for the proper functioning of the emergency active zone cooling and to protect it from overpressure.
- *Built (interim) cooling circuits* - these are closed cooling systems, providing heat removal of the primary loop systems to the service water system. These systems represent a protective barrier against penetration of radioactivity to the service water system in abnormal modes.



- *System for service water supplying of important users* - provides the residual heat removal from all important systems of the unit, which never allows continuous lack of cooling. In case of an accident, it takes the heat from embedded (interim) system cooling circuits for emergency cooling system of active zone or the residual heat removal.

The heat is removed from the system to the end heat sink, which consists mostly of cooling towers or spray ponds.

- *System for steam generator emergency supplying* serve to ensure the submission of demineralised water to the steam generators in case of failure of the system for normal operation. Thus the heat removal from the first to the second loop in accidents without loss of cooler in the primary loop is ensured.

System of protection coating (containment) - consists of an airtight inner and outer protection sheath. Containment consists of a real structure and tight junctions (passages penetrations, airlocks) and in its interior are the management of temperature and pressure inside the containment (e.g. Passive heat dissipation, sprinkler system, burning hydrogen, etc.). It is designed so that in operational states and accident conditions related to release of radionuclides, including severe accidents, these releases to the environment are limited. Construction and containment systems are designed so that the reactor primary loop and all related facilities, important in terms of nuclear and radiation safety, located in the containment shall be protected against external events, the occurrence of which cannot be excluded with sufficient degree of probability. Containment system also acts as a biological shield.

The secondary loop is not radioactive. It is designed to absorb heat from the primary loop and to transform it into kinetic energy of rotation of the steam turbine. The steam resulting from steam generators is collected in a common steam header and is directed to the turbine. In the turbine condensers, exhaust steam condenses and returns to the steam generators. The secondary loop comprises:

- *Main steam supply system (steam lines)* - the purpose of the system is the transportation of steam from the steam generator to the turbine in the range of flow rates and pressures, covering all operating modes of the heating system to operate at maximum power. Supply system includes a main steam lines, fast-acting shut-off valves, safety devices and connecting steam pipelines
- *Turbogenerator* - the function of the turbine generator is to convert the thermal energy of the steam into electricity. Turbogenerator does not perform functions related to nuclear safety of the unit. The generator is connected directly to the turbine shaft.
- *Oil system for turbine and generator* - located in the turbine hall. Here a tank, coolers, pumps, piping, valves and other equipment are installed. The facilities are secured against loss of oil from the system.
- *Main power supply system of the steam generators with feed water* - function of the system is supply feed water to the steam generators to the relevant parameters. A feeding station includes a main feed pumps and auxiliary feed pumps (for start and stop, and transient states of unit) and connecting piping systems and fittings. Thermal degassing is also performed in the feed tank (deaerator). Control fittings, together with the feed pump ensures maintaining the required level of nutritious water in the steam generator.



- *Auxiliary systems of the secondary loop* - these are cooling systems in the turbine hall, service water systems to non-important users, drainage system, heat exchangers etc. Some auxiliary systems provide the entire block such as chemical preparation of water and reserve demineralized water
- *Circulation system* - the system includes a pumping station for cooling water channels pipeline connection to the machine room, cooling of the condenser pipe connection to hot and cold channel etc. The condenser cooling will use water from the Danube River that flows through the third circulation loop and has no contact with the water from the secondary loop. Water from the coastal pumping station of Kozloduy is sent through channels to the power plant where pumps circulation pump stations supplying water in the turbine condensers of the new capacity.

Control and management system - together with other systems of the power plant provide electricity production in compliance with the high level of safety. A high degree of automation shall be used primarily to minimize the human factor and limiting the consequences of human error. Information and control systems will be provided with equipment so as to allow monitoring, measure, record and controlling the operational parameters that are important for nuclear safety during normal operation and emergency conditions.

Signalling and control are designed and positioned so that service personnel have continuous information on the operation of the nuclear facility and, if necessary, can intervene.

Control and information systems have audible and visual alarm, warning of the emergence of operational states and processes which deviate from the limits of normal operation and can affect nuclear safety.

Control and information systems for ongoing regular intervals depending on the needs will record the values of the parameters important for nuclear safety.

In case of emergency conditions the equipment shall provide the following:

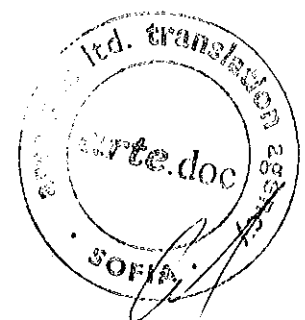
- information about the current status of the nuclear facility, the basis of which may be carried out protective measures;
- basic information about the progress of the accident and its recording;
- information allowing to predict and characterize the spread of radionuclides and radiation in the vicinity of the nuclear facility so that it is possible to promptly take measures to protect the population.

NNU will be equipped with facilities to monitor parameters at extremely unlikely accidents involving fuel melting.

Nuclear facility, part of which is the nuclear reactor shall be equipped with safety systems, which are:

- they could detect emergency conditions and automatically bring into force the relevant systems to ensure that the design limits are not exceeded;
- provided for "manual" input protection in case of need.

Protection and control systems are separated so that the failure of control systems does not affect the ability of the protection system to perform the required safety function. Protective systems are solved is high functional reliability through redundancy and independence of individual channels so that no elemental damage does not cause loss of protective functions of the system.



Modern human-machine interface will be used to control and operation of the new facilities, allowing the power plant personnel promptly and properly respond to all states of the nuclear facility and power systems.

The new nuclear power plant is planned to have:

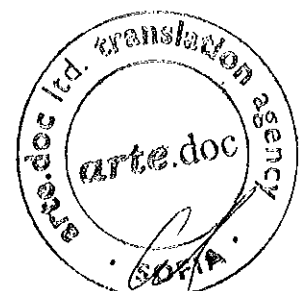
- high availability (over 90%) and long operational lifetime - at least 60 years;
- usability at fast load changes within 80% - 100% of rated power, without decreasing of efficiency;
- highly reliable systems implemented in depth concept of staged protection in all modes, including passive safety systems;
- possibility to perform fundamental safety functions - reactivity control, heat removal from the reactor core; retention of radioactive substances within the established limits in all operational states and accident conditions;
- project using the principle of diversity and self-diagnosis;
- project providing technical means by which human errors or limiting their consequences are excluded;
- high resistance to internal and external impacts, including earthquake, falling aircraft, floods, etc.;
- in case of fire - ensuring the implementation and long-term maintenance of the safety functions and control of the power utility, as realized firefighting measures will provide in-depth protection by preventing the emergence and growth of the fire, locating the spread of a fire and limit its consequences;
- devices and solutions for management of severe accidents and minimizing their consequences, reduced likelihood of melting core;
- higher burnup, leading to a reduction in fuel consumption and the amount of waste;
- burnable absorbers to extend the service life of nuclear fuel.

With regard to nuclear fuel in all types of feedstock used natural uranium mined in different ways. One of the most common types of nuclear fuel, in which uranium is included in the form of UO₂ and enriched in the isotope ^{U-235} is used for reactors such as pressurized water reactors (PWR) PWR in Western or abbreviation. Nuclear fuel, which will be used to meet the design basis at a maximum depth of combustion, set in EUR.

Structurally the system for external radiation control NNU fits into the current system of NPP "Kozloduy". Automated information system for external radiation control built into the surveillance zone (SZ) and protective zones for existing plant will serve also the New Nuclear Unit. Central Laboratory for external radiation control will serve the new power as control posts and checkpoints to collect samples for radiation monitoring of the environment in the area with a radius of 30 km from the site of NPP "Kozloduy" will operate the new nuclear power.

Activities decommissioning (DC) to NNU expected after more than 50 years. The period activities of decommissioning of NNU is a long period - more than 15-20 years

In the implementation of preparatory activities for the decommissioning will generate radioactive waste water (purified household faecal,



production and rainy). Facilities that provide drinking water supply and water for industrial purposes, as well as facilities providing treatment of this type of water will continue to operate. The existing treatment facilities will be sufficient and able to take the formed wastewater flows.

It is expected to generate and wastewater as liquid RAW in the preparation and monitoring of the area of safe storage (SS), which will also undergo processing in existing facilities to reduce the volume and safe storage for the intended purpose repositories.

Liquid RAW, produced before the stage dismantling decontamination, water decontamination of material of the blocks and liquid waste from special washing and cleaning the floors and corridors, will be treated as floor drain water and will be processed in existing built treatment facilities for waters. The secondary condensate after purification, decontamination and after binding radiological control will be disposed in the Danube River.

In NPP with reactors of new generation the process of disassembling shall be considerably easier than the previously existing pressurized water reactors, due to the generated and allocated smaller amounts of waste, which will reduce the amount of required demineralized water for decontamination. This condition in the namely interest of disassembling process is set in the design.

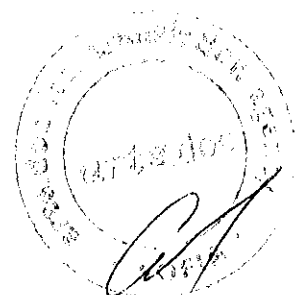
Existing non-radiation and radiation monitoring will be implemented also in the activities of decommissioning of New Nuclear Unit. This monitoring will continue in the years after closure and site restoration, according to its appointed destination.

In the final phase of the closure and rehabilitation of the site after the demolition of all water intake facilities for raw water from the river will be restored by appropriate engineering and reclamation solutions natural state of the coastline, impaired during the years of operation. The project, which will be implemented, will solve the situation and the need to maintain, upgrade and subsequent exploitation of the existing reclamation hydraulic structures.

Investment proposal does not affect protected areas (PAs) under the Protected Areas Act and does not fall within the protected areas (PAs) within the meaning of the Biological Diversity Act.

The nearest protected areas are BG0000533 "Kozlodui Islands", BG0000614 "Ogosta River" conservation of natural habitats and of wild flora and fauna and protected area BG0002009 "Zlatiyata" for the conservation of wild birds. Given the provision of Article 31, paragraph 1 of *the Biological Diversity Act* and Article 2, paragraph 1 of *the Regulation of the General Assembly*, the project has been assessed for its compatibility with the object and purpose in protected areas. After assessment pursuant to Article 39, paragraph 3 of *the Regulation on the General Meeting* that the investment proposal is likely to have a significant negative impact on natural habitats, populations and habitats of species subject to conservation in protected areas and given pursuant to Article 39, paragraph 5 of the same regulation guidelines report was prepared for assessment the degree of impact on protected areas (RADI). The expected impacts of the project on the object and purpose of the nearby protected areas have been extensively reviewed and evaluated in RADI.

on the following **grounds (factual basis)**:



1. The EIA report describes and assesses the impact of NNU on the environment and human health. Includes a detailed analysis, prediction and evaluation of impacts on all components and environmental factors, as well as health and hygiene aspects during construction, operation and decommissioning of new nuclear power of the latest generation of NPP, Kozloduy ". Proposed concrete measures to reduce, prevent or possible complete removal of the identified impacts on the environment and human health, taking into account and synergistic effects of background radiation. In view of the findings and conclusions, and prescribed by this Decision measures that ensure compliance with the quality standards of the environment and prevent adverse effects on human health, as well as the assessment of the compatibility of the IP with the object and purpose of conservation of protected areas, it is proposed to approve the implementation of the investment proposal for the construction of new nuclear power of the latest generation of NPP "Kozloduy" of Site 2, the following main conclusions of the team and the manager, prepared the EIA report:

1.1. During construction of New Nuclear Unit:

1.1.1. Linear gas emissions will affect air quality during construction,

1.1.2. The analysis of construction activities and the expected impacts during the construction of the New Nuclear Unit, the impact on surface water can be seen as a temporary, short-term and without a cumulative effect with regional sensitivity, reversible after the end of construction. Generated wastewater will not deteriorate water quality in the Danube River. Wastewater discharge into receiving water - the Danube River during construction work will not lead to a significant change in the quality of its water. The thermal regime of the Danube River will not be affected.

1.1.3. In terms of security of the new site advantage is proposed option for site 2, in which the existing elevation of the terrain is the highest and that is farthest from the Danube River. In this case there is a natural protection from flooding even in catastrophic high water levels in the Danube River. Site 2 has an advantage in terms of building the relationship with the existing hot and cold channels. It could with high probability be expected that during the construction of new nuclear power there is no real danger of flooding the construction site due to overflow of the surrounding embankments. For Site 2 is expected to be fully protected by the ice seals in the area of NPP "Kozloduy".

1.1.4. Significant negative impact on the realization of the project account provided engineering barriers to the transfer of radionuclides in the environment and groundwater are not expected. Probability of impact during construction is not expected in the use of advanced projects and technologies developed on the basis of the experience gained, the modern requirements of the regulations and provided safety measures. Transboundary impacts are not expected.

1.1.5. Bowels of the earth will not be materially affected by the implementation of the project. The expected impact is short-lived, temporary and limited in scope to humans and ecosystems, without accumulation effect for soil and reversibly to the atmosphere, with very low impact. Deterioration of the structure of the landscape is negligible. The territorial scope of the impact will be limited - only the specific area of the site.

1.1.6. In the construction phase no chemical contamination of the components of



landscape, including on landscapes of neighbouring Romanian territories are expected. Source of contamination and potential impact can only be the engine exhaust combustion of construction machines - CO, NO_x, CH₄, SO₂, hydrocarbons. Emissions will be limited in volume, within the working day, temporarily, to complete construction on construction sites.

1.1.7. Impact on the mineral diversity and cultural heritage are not expected. 1.1.8. Factor of impact in environmentally safe waste management on environmental components and in particular the soil, in the presence of a good organization and control, will be negligible.

1.1.9. In the realization of the investment plan amendment of endogenous (seism - tectonic) parameters of the geological environment in any stage of construction and operation of new energy power unit (construction, operation, decommissioning) are not expected.

1.1.10. Impact on biodiversity and habitats of target, rare, protected and important and sensitive species of flora and fauna is not expected.

1.1.11. Noise and vibration are limited to the territory of the construction site of the New Nuclear Unit and have no impact on the environment. Construction machines used in construction of the object are not sources of vibrations in the environment. Future technological equipment is not supposed to be a source of vibrations in the environment. No transboundary impacts in terms of noise, given the great distance between the NPP site and the nearest settlements on the territory of Romania (over 10 km) is expected.

1.1.12. Construction works implemented at the site of the new nuclear power unit will be a source of non-ionizing radiation for the territories of settlements in the area, because of the local impact only on the working site.

1.1.13. Impact of radiation factors related to the project during construction, due to the absence of significant, persistent and unregulated radioactive sources in this phase is not expected. The use of defectoscope subject to safety measures should not be a factor for radiation contamination of the working environment during the construction of new nuclear power.

1.1.14. Due to the remoteness of the construction site impact on the settlements around NPP "Kozloduy" is not expected.

1.1.15. There is no radiation risk to the population during construction.

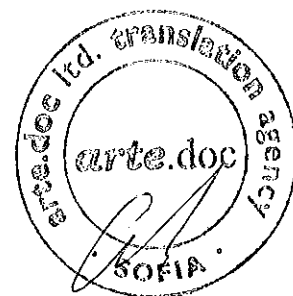
1.1.16. The existing infrastructure of NPP "Kozloduy" contributes to the safety of personnel during construction.

1.1.17. The deep geological structure within 30 km zone around the NPP "Kozloduy" is favourable because of the many natural barriers (clay formations) to limit migration of possible contaminants. This construction creates opportunities for significant transboundary impacts before, during construction and operation of the NNU.

1.2. During operation of New Nuclear Unit:

1.2.1. Gas emissions from internal combustion engines of special handling equipment in the area of Mute are negligible. Non-organized dust emissions and pollution from diffuse dust emissions are expected. Gas emissions will be insignificant compared to the pollution of daily average intensity of traffic on the road P-11 of the national road network.

1.2.2. With regard to component "ambient air", the 4 alternative sites for the location of the New Nuclear Unit have almost equal significance of impact - very low. None of



the sites is a potential danger of anthropogenic air pollution by radioactive contaminants in the area of IP. As the impacts of emission and pollutant concentrations are well below the recommended limits. Given the favourable climatic and meteorological characteristics of the area, and the fact that the region has no serious industrial pollutants it could be concluded that the IP impact on air quality will be negligible, but through the air - and indirectly and on the other components of the environment - soil, plant and animal life, health and hygiene. There is no transborder impact on the component air.

1.2.3. Wastewater will have local impact on the environmental situation in the region. No irreversible negative impacts on the environment are expected provided strict enforcement of IP to build the necessary sewage system and the construction of treatment facilities for waste water, ensuring compliance with regulatory requirements. Significant contamination of the receiver of conventional domestic and industrial wastewater from New Nuclear Unit is not expected. Wastewater discharge to the water receiver during operation is not expected to lead to a significant change in the quality of water of the Danube River.

1.2.4. In the implementation of waste treatment facilities for domestic wastewater and oily waste waters and retention tanks for rain water, is not expected to impact on the receiving water and the environment.

1.2.5. With effective control and management of the treatment processes and implement continuous monitoring of water quality in radiation and non-radiation aspect, will assure the emission limits of the discharged water in the receiver - the Danube River and preserve the quality of the aquatic ecosystem in the region,

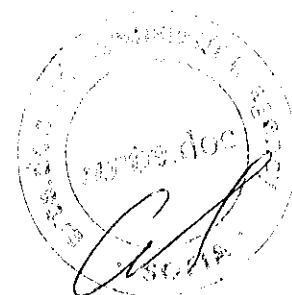
1.2.6. Consideration of impacts of IP for New Nuclear Unit could result in firm conclusion that the effects of radioactive waste waters on the receiver Danube River during operation will be local, permanent, reversible, but negligible.

1.2.7. The removing of water for cooling of existing and new nuclear power reactor in NPP "Kozloduy" in none of the four versions of the site is not expected to have a long, constantly, including cumulative and transboundary impacts on the regime of discharges of the Danube River, which is provided by the use of existing infrastructure - coast pump station (CPS), hot and cold channels. Commissioning of new nuclear power unit will lead to a substantial change in the thermal and ice regime of the river in the area between CPS and Oryahovo.

1.2.8. Considering insured amount of potable water for the NPP "Kozloduy" and the margin available in the consumption of the plant, part of which will be used by the New Nuclear Unit, the impact on total water consumption of NPP "Kozloduy" will be negligible.

1.2.9. Waste household and faecal, industrial waste and cooling water will not disturb the ecological status of water in the Danube River. The analysis of non-radioactive waste household - faecal, industrial and cooling water, as well as the necessary raw water from the Danube River for the needs of New Nuclear Unit, shows difference in the three reactors in relation to the required amount of raw water that is the least in the case of AP-1000 reactor, but in all three types of reactor shall not exceed the permitted amount of water for abstraction of fresh water.

1.2.10. In conventional waste water, pollution load entering the total wastewater stream through TC-1 in the Danube River, in all types of reactors shall not



exceed the IEO from the joint activity of the new nuclear power and the existing 5 and 6 of NPP "Kozloduy"

1.2.11. For flowing water amounts to $Q_T = 160 \text{ m}^3/\text{s}$ the influence of the heat exchange between the heated water coming from the NPP "Kozloduy" in the Danube River on the section from kilometre 687 (discharge of hot channel) to 678 km (port Oryahovo) and the environment is negligible and can be ignored. Even after the commissioning of the new capacity thermally influenced zone of confluence of the warm water of New Nuclear Unit will not be changed. After commissioning of NPP "Kozloduy" there is some heat load at Oryahovo ($^{\text{km}} 678$) compared to Lom ($^{\text{km}} 743.3$), which does not exceed $3 \text{ }^\circ \text{C}$, which is the limit of the regulations.

1.2.12. No transborder impact on the component "surface water" is expected.

1.2.13. Subject to all measures for effective management of non-radioactive waste is not expected significant negative impact on individual components of the environment.

1.2.14. During operation, the negative impacts on land are negligible. The period of operation of the project is not associated with negative effects on the landscape components. Pollution of landscape components with pollutant emissions is not expected.

1.2.15. Impacts on the landscape units within the 30 km zone around the NPP "Kozloduy" in the exploitation phase, and neighbouring Romanian territories are not expected.

1.2.16. Predicted impacts on flora and fauna as a result of the realization of the project is assessed as weak, mainly indirect or those occurring in emergency and force majeure situations that can be avoided without the use of special measures hitherto applied preventive and monitoring activities;

1.2.17. Significant negative impact of warm water stream that will be fed into the waters of the Danube River on the protected species of the genus *Alosa* and spread of invasive species Asian *Corbicula* (*Corbicula fulminea*) on biodiversity in the project area is not expected.

1.2.18. Under strict instructions of safety hygiene and technical safety for work related to hazardous activities (mandatory use of personal protective equipment, and other measures) no risk to health workers, local population and the environment, as well as the use of relatively limited quantities is expected. Materials classified as hazardous substances are provided conservation and control work in accordance with all legal requirements. Spills and leaks that have a negative impact on the components of the environment - air, water, soil, flora, and fauna and cause a health risk to the population inhabiting the area are excluded. When promptly remove any small accidental spills, the probability of impact is minimized. Transboundary effects are not expected.

1.2.19. There will be no noise impact of technology activities performed at the site of the new nuclear power on nearby settlements because of the large enough distances on the site and in the four variations of deployment at the site (2500 m).

1.2.20. Transport vehicles servicing the activities of the new nuclear power unit are not expected to be sources of vibrations in the environment.



1.2.21. Impact on the population regarding electromagnetic fields (EMF) with industrial frequency emitted by sources after realization of IP, in compliance with the national legislation of the easement zones around high voltage power lines is not expected.

1.2.22. Non-radiation effects on components and environmental factors are not expected. In non-radiation aspect operation of New Nuclear Unit for 60 year lifetime will have a negative impact on the population in the 30 and 100-kilometre zone around the plant.

1.2.23. Radiation effects on water, land and soil, geological environment, earth, land, mineral diversity, biodiversity; habitats of protected target and sensitive species of flora and fauna; landscape; historical and cultural heritage; protected areas and protected areas are not expected.

1.2.24. Contribution of NNU to the background radiation in the vicinity of the Kozloduy from external radiation is negligible even in cumulating with the existing nuclear facilities on the site of NPP "Kozloduy". Cumulative effects in radiation and non-radiation aspect of the environment is assessed as negligible.

1.2.25. The health risk of the nearest residential area is negligible. The radiation risk to the population during the operation has a very low probability, temporarily short without a cumulative effect and reversible. The performed mathematical model estimates show that the additional radiation exposure of the population in 30 km area of operation of the NNU is negligible and is not expected transboundary impacts. In summary, assessments NNU are fully comparable with the data for a large number of PWR reactors in the world (UNSCEAR-2000,2008) and no transborder effect is expected.

1.2.26. There is no risk of deterministic effects in the 30-km zone of the NPP "Kozloduy". Individual doses of gas-aerosol releases in cumulating with all nuclear facilities and NNU are in the range of $1.35 \times 10^{-6} + 1.94 \times 10^{-6}$ Sv and just from New Nuclear Unit - gas-aerosol releases are within the range of $1.79 \times 10^{-8} + 6.13 \times 10^{-7}$ Sv. These doses are much lower than the threshold set under Article 10 BSRP limit for annual effective dose, which is 1 mSv for the population,

1.2.27. Radiological results of analysed accidents, as can be inferred from the analyses, evidence of acceptability of environmental risks. The results of the evaluation of design basis accidents show that any hypothetical design basis accident human exposure does not cause the need for the adoption of any immediate protective measures, even in the nearest habitable zone of New Nuclear Unit.

1.2.28. Modelling of the radiological effects of severe accidents is not enough to pass the thresholds for urgent protective measures beyond the existing emergency planning zones of NPP "Kozloduy". If it comes to follow precautions, even in the nearest populated area about New Nuclear Unit permanent relocation is not implied (the threshold dose of 1 Sv IS NOT EXCEEDED). In this case, regulation of the distribution and consumption of agricultural produce in a distance up to 30 kilometres from the source depending on the direction of the pollution should not be excluded. More than a half of the total amount of radiation will be carried out by way of ingestion. Therefore, it could be concluded that the introduction of short restriction in the consumption of locally grown products would have extremely meanings on the reduction of the dose rate.

1.2.29. The maximum annual effective dose in the 30 km zone of NPP "Kozloduy" due only gaseous emissions in all operational



conditions of existing and new nuclear capacity is estimated at 1.94 pSv/a. This is only 0.08% of exposure to natural background radiation in the country (2.33 mSv/a) and 0.2% of normal population (1 mSv/a) basic standards for radiation protection (BSRP- 2012). The maximum annual effective dose to the population of 30 km zone of NPP "Kozloduy" due only liquid emissions under all operating conditions of existing and new nuclear capacity is estimated at 1.63 pSv/a. This exposure is negligible and represents less than 0.16% of the annual effective dose limit of 1 mSv (BSRP-2012) and hundreds of times lower than exposure from natural background radiation (2.33mSv/a).

1.2.30. The risk of radiation-induced cancer is respectively: $3,29 \times 10^{-8}$ AP-1000; $9,85 \times 10^{-10}$ AES BBER-1000/B466 and $3,37 \times 10^{-8}$ to EUR limit discharges, and the likelihood of hereditary diseases respectively: $1,2 \times 10^{-9}$ AP-1000; $3,58 \times 10^{-11}$ to AES BBER-1000/B466 and $1,23 \times 10^{-9}$ EUR limit discharges, therefore the risk of stochastic effects is negligible.

1.2.31. Expected potential radiation effects on personnel servicing New Nuclear Unit should be within the design requirements for the facility. In operation expected impact of the dose load for personnel to be in compliance with legal requirements.

1.2.32. Project of upcoming realization of nuclear unit ensures that the radiation exposure of workers is in accordance with the ALARA principle and is limited by BSRP-2012. The experience gained in compliance with the procedures of NPP "Kozloduy" will be applied during normal and emergency actions and conditions in the future will minimize the likelihood of radiation exposure.

1.2.33. The results show negligible levels of exposure of the population. For example, the region of NPP "Kozloduy" additional public exposure of the population of aerosol gas and liquid emissions into the environment is estimated conservatively 3.56 mSv/a is less than 0.2% compared to exposure from natural background radiation (average for the country and world - 2.4 mSv) and is repeated in the annual effective dose limit of 1 mSv, according BSRP-2012. Regarding dose effects of IP and technology both alternatives meet the legal requirements and the requirements set by the Nuclear Regulatory Agency (NRA) for New Nuclear Unit - annual individual effective dose for the population, caused by the impact of the liquid and gaseous discharges into the environment environment in all operational states to be limited to 0.05 mSv.

1.2.34. The health risk to the population from the nearest residential area (Kozloduy) is negligible. During operation, non-radiation emission, with the necessary technological requirements and conducting regular environmental monitoring is not expected significant negative impact of the new nuclear power plant on the health of the population.

1.2.35. Area of potential impact is limited to a secured site of NPP "Kozloduy". This area is not accessible to the population. Transboundary impacts are not expected. Radiological impact during operation on human health is of very low probability, indirect, secondary, temporary, 1 brief and with very low significance without a cumulative effect and reversible. Any possible negative impact of New Nuclear Unit on the environment and public health, including taking into account the synergistic effects of the radiation background is within the permissible according to regulations. No significant negative impact on new nuclear power on



public health, and negative deviations in performance in morbidity and demographic realities is expected.

1.2.36. The contribution of new nuclear power to background radiation in the vicinity of the town of Kozloduy external radiation is small. The cumulative impact on the environment would be negligible. No transborder impact is expected.

1.2.37. There are no climatic conditions for transboundary pollution. The information submitted with a letter to the Ministry of Environment and Forests of Romania with monitoring data of the Danube River and Jiu river, there is no data that show an effect of the activities of the current NPP "Kozloduy" on the waters on the Romanian territory.

1.2.38. Data for radiological condition of soils within 30 km zone around the nuclear power plant in the Republic of Bulgaria, including set points for the content of the two most biologically dangerous radionuclides Sr-90 and Cs-137 does not show contribution from the plant operation.

1.2.39. Thee information concerning soil, provided by Romania gives no information about the pollution of their areas of activity of the existing capacities of NPP "Kozloduy" neither 30 nor in 100 km area of influence. Due to meteorological conditions and the direction of winds near the probability of soil contamination in Romania resulting from the operation of nuclear power is small. The analysis of the radiological status of soils within 30 km zone around the NPP on Bulgarian territory can be assumed that in normal operation will have no impact on land use and agriculture in Romania.

1.2.40. The results obtained from the study of the additional Romanian data can be viewed as another confirmation of the conclusion already made that from seismological point of view, the local 30 km sub regional 50 km area around the site of NPP "Kozloduy" belong to the most peaceful parts of the central Balkans.

1.2.41. Negative impact of waste in compliance with all Bulgarian and international legal requirements and practices is not expected.

1.2.42. The existing infrastructure of NPP "Kozloduy" and the years of experience in service of the plant helps both the safety of the population and the staff in the operation of the NNU.

1.2.43. Gas-aerosol releases will not have a significant impact on the health status of the population within the 30 km zone around the NPP "Kozloduy".

1.2.44. Area of potential impact during normal operation and design basis accidents is limited to a secured area of NPP "Kozloduy". This area is not accessible to the population. The area of potential impact does not transcends national borders of Bulgaria,

1.2.45. In carrying out the activities envisaged in the project at every stage of implementation, no direct effects on components and factors of the environment in Romania are expected.

1.2.46. Both in Bulgarian and Romanian part of the 30-kilometre zone of observation no negative impacts are expected from the implementation of NNU on plant species and natural habitats, due to the absence of pollution of air, water and soil emissions, and lack of radioactive and light pollution.

1.2.47. In the Romanian part of the 30-kilometre zone of observation no significant negative impact on the realization of a New Nuclear Unit animal species due



absence of pollution of air, water and soil emissions, as well as lack of radio, noise and light pollution are expected.

1.2.48. The impact of the implementation of NNU 30 km observation zone and the integrity of the four protected areas ROSPA0010 Bistrej (Bistrets), ROSPA0023 Confluenjă Jiu-Dunăre (mergers the Jiu river and the Danube River), ROSPA 0135 Nisipurile de la Dăbuleni (Sands of Dabuleni) and ROSCI0045 Coridorul Jiului (Corridor of the Jiu river) in view of their structure, function and conservation objectives is not expected. No transborder effect is expected. Documented positive effects of the discharge of warm water from the hot channel to the Danube River of NPP "Kozloduy" on fish-eating birds, which are globally, threatened species such as curly head Pelican (*Pelecanus crispus*).

1.2.49. No direct impact on objects of immovable cultural heritage is expected, unless required "absorption" of new areas related to the operation. No cumulative effect is expected.

1.2.50. Data on the current state of NPP "Kozloduy" gives grounds to assume that the operation of the NNU for 60 years will have a negative impact on the population in the 100 kilometre zone around the plant in Bulgaria and Romania. Significant social impact is not provisioned. No transboundary impacts are expected.

1.3. In decommissioning:

1.3.1. After the final decommissioning of the facility land will be fully reclaimed and will be determined way to their future use. No negative impacts are expected on the structure of the landscape. Actions in implementation of reclamation of damaged areas will have a positive impact on the landscape.

1.3.2. Negative impact on the population outside the 2-km zone in the decommissioning of New Nuclear Unit is not expected.

1.3.3. The impact of all types of emissions during decommissioning will be identical to those laid down during construction, but since the impact will be greater time interval, their significance is expected to be negligible.

1.3.4. Non-radiation effects on environment components and factors are not expected.

1.3.5. No radiation effects on water, land and soil, geological environment, earth, land, mineral diversity, biodiversity; habitats of protected target and sensitive species of flora and fauna; landscape; historical and cultural heritage; protected areas and protected areas, as well as on the health of workers and the public are expected. No transboundary impacts are expected.

1.3.6. The radiation risk to the population during decommissioning is not expected.

1.3.7. Effects of non-ionizing radiation (NIR) at the stage of decommissioning are connected with the construction of new and reconstruction of existing buildings, removal of equipment and the processing of waste and transportation. In these activities there shall be no sources of NIR, except some construction equipment with high consumption of electricity. There are no sources of non-ionizing radiation and for the territories of settlements in the area.

1.3.8. During decommissioning, cumulative impact of non-radiation factors is not expected.



1.3.9. No negative impact of RAW subject of plans for decommissioning of the nuclear facility and all Bulgarian and international legal requirements and practices is expected.

1.3.10. No pollution of the Danube River of domestic waste and industrial waste water, due to the built and operating treatment plants in all stages of decommissioning, to the final stage of reclamation is expected.

1.3.11. No impact on objects of immovable cultural heritage is expected, if no use of new areas undamaged original surface is provisioned

1.3.12. Due to the remoteness of NNU no impact the settlements around NPP "Kozloduy" in DC is expected.

1.4. In all three phases of the implementation of the IP: construction, operation and decommissioning no transboundary impact on Romanian territory 30 km zone around the NPP "Kozloduy" is identified.

1.5. No changes in climate due to non-radiation emissions during all three phases: construction, operation and decommissioning are expected. The implementation of IP will have no effect on the regime, the spatial distribution of the values of the climatic elements of the adjacent territories of alternative sites.

1.6. Based on the analysis and evaluation of the impacts on all components and environmental factors, including Biodiversity Conservation implementation of the IP "Construction of new nuclear power of the latest generation of NPP" Kozloduy" priority choice for building new nuclear power (NNU) is Site 2.

Regarding the option of the type of reactor all the three technical solutions are options for the realization of the project.

1.7. Site 2 is defined as the most suitable in terms of: scope, characteristics and type of impact - local, direct, negative, low impact, temporary and limited in compliance with legal requirements and the measures envisaged during construction directly, low to medium wall impact, limited term, with a minimum cumulative impacts and irreversible, but limited in compliance with legal requirements and the measures envisaged during operation.

1.8. Decision of the Council of Ministers in Protocol № 14 of 11.04.2012 gives a principle agreement to take the actions necessary to build new nuclear power unit in the NPP "Kozloduy".

1.9. BBER reactors (PWR) are most commonly used in the world. The process of design, construction, commissioning and decommissioning of new nuclear power will be carried out in accordance with legal requirements, including the Act of Safe Use of Nuclear Energy (ASUNE) and related regulations.

1.10. Design of a nuclear power unit will meet the requirements of European organizations operating NPPs with light water reactors (EUR - European Utility Requirements for LWR Nuclear Power Plants).

1.11. Radiological results of analysed accidents testify to the acceptability of environmental risks. The results of the evaluation of design basis accidents show that any hypothetical design basis accident human exposure does not cause the need for the adoption of any immediate protective measures, even in the nearest habitable zone of New Nuclear Unit.



Modelling of the radiological effects of severe accidents is not enough to pass the thresholds for urgent protective measures beyond the existing emergency planning zones of NPP "Kozloduy". Follow precautions, even in the nearest populated area about New Nuclear Unit, permanent relocation is not implied (the threshold dose is not exceeded 1 Sv). The regulation for distribution and consumption of agricultural products in distance to 30 km from the source depending on the direction of the pollution is not excluded.

2. Assessment of the probable extent of the negative impact that the IP does not lead to a significant negative impact on the object and purpose of protection in the closest protected areas:

2.1. BG0000533 "Kozloduy Islands" and BG0000614 "Ogosta River" conservation of natural habitats and of wild fauna and flora due to the following:

2.1.1. Implementation of IP is not related to withdrawal of areas from the scope of protected areas and wildlife corridors break links between them, so there will be no loss of integrity, structure and function, as well as significant negative indirect and direct effects on natural habitats, habitats of species subject to protection in them;

2.1.2. The implementation of IP will not lead to fragmentation of natural habitats and habitats of species subject to protection in the nearby protected areas, as its implementation will be carried out entirely outside their borders;

2.1.3. The implementation of IP in the construction phase will have no significant negative impact on the species of fish, amphibians and aquatic invertebrates that are preserved in the nearby protected areas, given the remoteness of the site of the habitats of species. During the operation of the facility a marginal increase in water temperature in the Danube River after the discharge of the hot channels is expected, this favours the development of already established invasive alien species (mussels, fish and other invertebrates). With the implementation of the planned mitigation measures, the impact will be reduced to negligible;

2.1.4. Implementation of activities under this IP will lead to a change in the size and structure of populations of species of mammals (gopher, *Mesocricetus newtoni* and otter), reptiles (Hermann's tortoise, pond turtle, colourful snake) and of terrestrial invertebrates (stag beetle, *bolbelasmus unicornis*, large long-horned beetle beech, alpine rose), subject to conservation in protected areas, given the remoteness of their habitat from the construction site;

2.2. The implementation of IP will not lead to a significant negative impact on the object and purpose of protection in the nearby conservation area BG0002009 "Zlatiyata" for the conservation of wild birds, given the following circumstances:

2.2.1. The implementation of IP will be carried out on land located outside the protected area and is not intended withdrawal of areas of its range, so will not violate the integrity, structure and functions of protected area BG0002009 "Zlatiyata" for the conservation of wild birds;

2.2.2. According to research conducted by the authors of RADI, site of NPP "Kozloduy" remains about 19 km east of the main migration route in the protected zone, so do not expect the IP to lead to the withdrawal of the key areas of importance for the migration of wild birds ;

2.2.3. The results of the field studies show that the area required for the implementation of the IP does not provide nesting and foraging habitats and resting place for birds subject to conservation in the protected zone, which is why there will be no significant



negative impact manifested in fragmentation or destruction of habitats and disturbance of the structure and integrity of populations.

2.3. The level of noise pollution in the operation of the IP, which can lead to anxiety and displacement of species, including birds will be minor, given the established adaptation of species to the existing site of NPP "Kozloduy". The noise caused by construction equipment at the realization is of a temporary nature and will be restricted during construction activities, which is considered a minor impact;

2.4. No significant negative impact on the subject of conservation in the nearest three protected areas as a result of cumulative impacts from the implementation of this IP with past, present and future plans, programs, projects and investment intentions is expected;

2.5. According to the studies to determine the current state of the natural background radiation and radioactivity of air in the region 30 km observation zone around the NPP "Kozloduy" before the start of construction was found that the equivalent dose of gamma radiation in the range of 0.10 to 0,19 pSv/h, which are similar to measure in recent years, suggesting that this background will remain in the same borders during construction, during operation and during decommissioning. Therefore there will be no change in the size and structure of populations of species (including poultry), subject to protection in the nearby protected areas as a result of the IP.

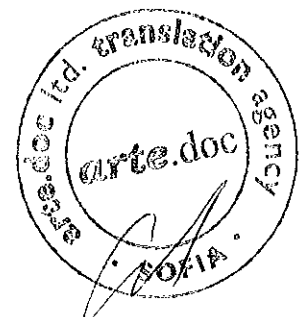
3. After performing equivalent consideration of possible alternatives for the implementation of the investment plan and the analysis and evaluation of impacts on all components and environmental factors, including biodiversity conservation in the implementation of the IP *Construction of new nuclear power unit of the latest generation of NPP "Kozloduy"* is the proposed site for the construction of two new nuclear power facilities (NNU).

4. Basin Directorate for Water Management Danube region with centre Pleven (BDWMDR) express an opinion on the meaning of Article 4a, paragraph 1 of *the Ordinance on EIA ref.№ 3804/04.07.2012, the opinions and with ref. № 3804/19.09.2013, and 3804/15.11.2013, that the investment proposal is acceptable in terms of achieving environmental objectives and measures to achieve good water status in the Plan for Management of River Pools (PMRP) in the Danube region.*

5. In terms of analysis and assessment made in the report EIA on the significance of positive and negative impacts on human health and the possible risk of the construction and operation of the project in relation to the provision of Article 14, paragraph 2 item 1 of *the Ordinance on EIA, Ministry of Health (MoH) by letter ref.№ 04-09-184/01.10.2013, give positive estimation of the EIA report, provided that the presentation of its public consultation be reflected in the opinion of those remarks. With reference to the report submitted EIA removed inaccuracies, MoH by letter ref.№ 04-09-184/06.11.2013 notice that it is agreed without any comments and suggestions.*

6. In pursuance of the provisions of the Convention on EIA in a Transboundary Context:

6.1. Bulgaria notifies Romania as affected by the project country. In response to the letter № 3672/RP/18.10.2012, Romania expressed willingness to participate in the EIA procedure. In the course of the EIA procedure Romania is provided with EIA assignment scope, in response to that letter



№3072/PR/06.08.2013, Ministry of Environment and Climate Change of Romania expressed its opinion. By letter ref. № EIA-53/29.10.2013, Ministry of Romania provides information on access to the EIA report and its annexes in English and translated into Romanian language of the non-technical summary and part 11 - Transboundary effects. Ministry of Environment and Water in Bulgaria informed the Ministry of Environment and Climate Change of Romania for meetings for public discussion of the Bulgarian territory and for allowing for the participation of the public and the institutions of the country concerned, as well as translation of the Romanian language. By letter № 5170/LR/26.11.2013, the Ministry of Environment and Climate Change of Romania Ministry informs that it wishes to hold meetings for public discussion of the EIA in Romania. By letter № 5170/PCS/19.12.2013 Ministry of Environment and Climate Change of Romania comment on the EIA documentation. In response, by letter ref.№ EIA-220, the/30.01.2014 Ministry of Environment and Water in Bulgaria sends the opinion of the contracting authority in connection made by Romania comments on the EIA report.

With reference to opinion of the Ministry of Environment and Climate Change of Romania, № EIA-220/04.08.2014 of the MoEW, on presented by the contracting authority comments made by Romania comments on the EIA report, in response to contracting with letter ref.№ EIA-53/25.05.2014 from MoEW provides opinion and additional information that is sent to Romania.

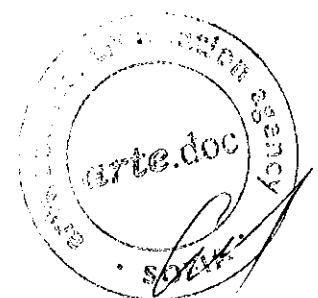
By letter № 3035/AK/31.10.2014 Ministry of Environment and Climate Change of Romania informed the Ministry of the necessity of organizing and public discussion of the EIA report on the territory of Romania on 18/11/2014 and 19/11/2014, 20/11/2014, respectively in the town of Dabuleni,, the town of Craiova and the town of Bucharest. Romania is provided with a translation of the EIA documentation - Parts 2, 4, 5, 9, 11, 12 and non-technical summary also in Romanian language at designated dates and places were held public hearings with the participation not only of Romanian citizens, institutions and organizations, but also of Bulgarian citizens and organizations. Translation of presentation in Romanian is provided.

By letter № 3035/AK/12.05.2014 Ministry of Environment and Climate Change of Romania provides MoEW application № 1 and № 2 application containing questions, statements and comments from the public and conducted public hearings in Romania. With this reference and in response to the expressed opinion of the assignor ref. № EIA-53/15.12.2014, sent to Romania, Ministry of Environment, Water and Forests of Romania by letter ref. № EIA-53/29.12.2014, the Ministry provides its final opinion on transborder EIA procedure, making proposals that are included as conditions in this EIA.

6.2. With reference to the declared interest of the Ministry of Agriculture, Forestry, Environment and Water Management of Austria by letter BMLFUW-UW.1.4.2/0016-V/1/2013/15.03.2013, Bulgaria notified Austria in response to which the State wishes to participate in the EIA procedure.

During the EIA procedure, Austria was informed by letter ref.№ EIA-220/06.12.2013 of the insured through the website of the Ministry access to assignment scope and content of the EIA report in English. By letter dated 26.06. 2013. Austria expressed an opinion with questions or comments that are conformed to the EIA report.

By letter ref. № EIA-53, the/29.10.2013 Ministry of Environment and Water provides information to the Ministry of Agriculture, Forestry, Environment and Water Management of Austria on access to the EIA report and its annexes in English and translated into German



language of the non-technical summary and part 11 - Transboundary effects. MoEW inform Austria for meetings for public discussion of the Bulgarian territory by providing the opportunity for public participation and institutions of the State concerned.

By letter BMLFUW-UW.1, 4.2/0076-V/1/2013/20.1 2.2013 Austria provides public comments and the opinion of the Austrian Environment Agency commissioned by the Ministry of Agriculture, Forestry, Environment and Water Management. By letter ref. № EIA-220 /13.03.2014 MoEW sent to Austria opinion on comments and questions to the competent authority and the public.

In response to a letter BMLFUW-UW.1.4.2/0031-V/1/2014/04.25.2014 Ministry of Agriculture, Forestry, Environment and Water Management provides independent report prepared comments and express its final opinion on cross-border procedure EIA waiting for the EIA. Given the conclusion of commissioned an independent report, Austria considers the stage of consultation in a Transboundary Context is concluded because there are no more questions and requested a public debate on its territory.

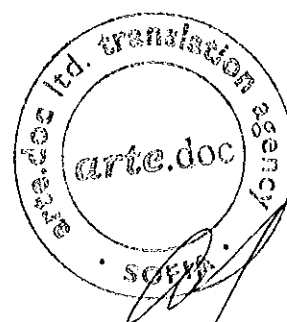
With this reference and given the received opinion of the contracting authority with ref. № EIA-220/07.28.2014 of the MoEW, after a thorough review of the comments received from Austria no need for additional research and analysis, to supplement the EIA report was established .

7. In the course of the EIA procedure consultations with interested persons and bodies were implemented. There is public access to the EIA report with all its annexes, as follows:

- on the websites of "Kozloduy - Novi moshtnosti" EAD and "AETS Kozloduy" EAD;
- in the buildings of MoEW, RIEW Vratsa and Montana RIEW;
- House of energy in Kozloduy;
- in the Kozloduy Municipality , Oryahovo Municipality, Mizia Municipality , Vulchedrum Municipality , Hayredin Municipality ;
- in the town hall in the Altimir village, Bardarski geran village, Galiche village, and Tarnava village in Byala Slatina Municipality;
- in the town hall in Malorad village, Dobrolevo village, Sirakovo village, Borovan Municipality;
- in the town hall in Furen village, Krivodol Municipality ;
- in the town hall in Lehchevo village, Boychinovtsi Municipality as well as at deputy - mayor in Stanevo village, Lom Municipality and Beli brod village, Boychinovtsi Municipality.

Places, dates and times of public hearings, places and time for public access to the EIA report and all annexes thereto, as well as places to provide written comments are quoted in national and regional media: radio Elto Kozloduy, "24 chasa" newspaper, "Konkurent" newspaper.

Information and advertisement for their meetings for public discussion and the EIA report with annexes, are available for public access, which is provided in Glozhene village, Harlets village, Butan village, Kriva bara village, Kozloduy Municipality; Botevo village, Manastirishte village, Mihaylovo village, Barzina village and Rogozen village, Hayredin municipality; Septemvriytsi village, Mokresh village, Razgrad village, Dolni Tsibar village, Zlatiya village, Gorni Tsibar village, Ignatovo village, Botevo village, Buzovets village, Cherni vrah village, Vulchedrum Municipality; Lipnitsa village, Sofronievo village, Saraevo village, Krushovitsa village and Voyvodovo village, Mizia Municipality; Leskovets village, Ostrov village, Galovo village, and Selanovtsi village, Oryahovo municipality; Galiche village, Tarnava village, Bardarski geran village and Altimir village, Byala Slatina Municipality; Sirakovo village, Malorad village, Dobrolevo village, Borovan Municipality; Beli brod village, Lehchevo village, Boychinovtsi Municipality; Stanevo village, Lom Municipality; Furen village, Krivodol



Municipality.

Meetings for public discussion were held on 14/11/2013, 15/11/2013, 18/11/2013, 11/19/2013, and 20/11/2013 in the municipalities of Oryahovo, Mizia, Valchedram Hairedin and Kozloduy and on 18.11.2014, 11/19/2014 and 20/11/2014, respectively in Dabuleni town, Craiova town and the town of Bucharest, Romania, given the stated desire by the country concerned. During the public access to the EIA documentation and the period of meetings for public discussion received different types of pleadings containing opinions, comments, questions, objections and proposals, including stored in designated notebooks for expressing opinions.

Pursuant to the requirements of Article 17, paragraph 5 of the *Ordinance on EIA, written opinions with ref.№ 26- 00- 3395/02.12.2013, and ref.№ EIA-53/12.15.2014, from public hearings in Romania. The opinions are on the proposals of the contracting authority, statements, recommendations, questions, remarks and objections as a result of the public discussion of the EIA report, which is as presented in the affected municipalities and town councils and the Ministry of Environment and Climate Change of Romania. With reference to receive after the public hearings in Bulgaria opinion of Mr. Peter Kardzhilov, the assignor has submitted additional observations with ref. № EIA-53/17.12.2013 of the MoEW that the comments were taken into account and reflected in part II- Written statements, item 7 of the document presented on 02.12.2013. Given the requirements of Article 17, paragraph 6 of the Ordinance on EIA, the Ministry received a letter from the assignor (ref.№ EIA-53/17.12.2013), that after the meetings of public hearings and after a thorough review of all written comments received have not been established for complementing the EIA report, according to the statement of reasons referred to in each of written comment .*

Within prescribed in the *Regulation for Public hearings* one month for access by the public to report on EIA (from 02/10/2013) no motivated pleadings information within the meaning of Article 39 paragraph 10 of the same ordinance, respectively Article 17, paragraph 7 of the Ordinance on EIA in relation to the closest protected areas BG0000533 "Kozlodui Islands" and BG0000614 "Ogosta river" conservation of natural habitats and of wild flora and fauna and protected area BG0002009 "Zlatiyata" for the conservation of wild birds were received.

8. By Decision 1-1/2015 of 19/01/2015, the Supreme Expert Environmental Council proposes to approve the implementation of the investment proposal and under the following conditions:

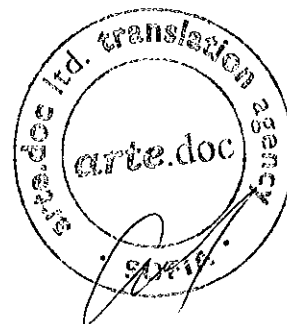
I. For the design phase and construction:

1. To prepare a long-term program for New Nuclear Unit radiation monitoring of the environment. The program in accordance with the then-current statutory requirements, the development of technology in this field, international best practices and operational experience of NPP "Kozloduy, and include:

1.1. Departmental/self - radiation monitoring of environmental components on indicators and norms regulated by the currently regulatory requirements;

1.2. Plan of departmental/self-monitoring, including monitoring points around the new facilities and buildings stats to be performed even during construction. The plan should provide:

- determination of physical and chemical parameters associated with the radiation status of groundwater;



- wastewater monitoring to be held at all stages of the implementation of New Nuclear Unit, including and in case of emergency;
- soil monitoring;
- monitoring point at the Danube River before discharging wastewater from NNU to it, and after the discharge of TK- 1, to determine the contamination of NPP and New Nuclear Unit in the Danube River and more accurate assessment of water quality in the river. At the monitoring point measurement of water quantity and physic-chemical and biological elements that characterize the state of water in the river should be provided at least once a month.

1.3. Program for radiation and meteorological measurements possible radiation accident in NNU that defines the organization and procedures for effective radiation and meteorological monitoring in specific areas of emergency planning.

1.4. Program is coordinated with the Executive Environment Agency, the Ministry of Health (MoH) and the Nuclear Regulatory Agency (NRA).

2. To prepare a plan for institutional/private non-radiation monitoring to provide an annual report to be provided in the EEA. The plan includes:

2.1. Monitoring of groundwater level (NPV);

2.2. Monitoring of invasive foreign aquatic species in the port area of the NPP during construction and operation of the NNU.

3. To provide monitoring during construction of archaeological artefacts and a variety of different character remains of ancient human activity contained usually in the surface soil deposits.

4. To develop and implement a program to manage RAW, justifying management activities all generated RAW to their transmission to the SE RAW or release from regulatory control.

5. To develop internal emergency plan pursuant to the Act of safe use of nuclear energy (ASUNE) for disaster and the Regulation on emergency planning and emergency preparedness in case of nuclear and radiation accident in scope underlie action to prevent accidents and incidents .In accordance with the Emergency Plan to establish and maintain a corresponding risk procedures and instructions for emergency actions.

5a. Before construction starts, the contracting authority to evaluate and develop measures for the safe storage of the hazardous chemical substances and mixtures in accordance with the requirements of Regulation on the procedure and manner of storage of hazardous chemical substances and mixtures, and with the requirements set out in applicable safety data sheets (MSDS).

5b. Construction of facilities for storage of hazardous substances should be performed in accordance with the general requirements for by Article 6 of the Regulation on the procedure and manner of storage of hazardous chemical substances and mixtures, and after assessing the safety of storage for each of the sites, according to Article 9, paragraph 4 of the Regulation.

6. Operators should classify the undertaking under Article 103, paragraph 1 of the EPA on the basis of project capacity the facilities are stored and/or use hazardous substances and mixtures within the scope № 3 of the EPA. If the enterprise is classified with low or high risk potential for a major accident, the operator should take action under Chapter VII, Section I of the EPA.

7. Before commissioning of facilities and installations, the contracting authority to draw up its own assessment of the possible cases of imminent threat of environmental



damage and caused environmental damage, to the activities from the scope of the Act on liability for preventing and remedying environmental damage, in accordance with Annex № 1 of Regulation № 1 of 29.10.2008 on the type of preventive and remedial measures as provided in the Act responsibility for preventing and remedying environmental damage and the minimum cost of implementation and present it in RIEW Vratsa.

8. Given the letter № 3035/GLG/23.12,2014 of the Ministry of Environment and Forests of Romania, to update the reasoning of the parameters (in particular of peak ground acceleration) of an earthquake with an incidence rate of 1 in 10,000 years based on recent seismic data and current international requirements and applicable standards, confirmed in accordance with paragraphs 11:18 to 11:20 of the publication "Assessment of seismic risk sites for nuclear installations", № SSG-9, Specific Safety Guide, International Agency Atomic Energy Vienna 2010.

9. Research results for probabilistic safety analysis for the project, level 2 (PSA), including the sources and estimated frequency of accidents that lead to release of radioactivity into the environment, to be submitted to the appropriate authority to ensure their accessibility for the Romanian authorities in finalizing.

10. After preparation of the working draft in need to build water draining system and/or drainage system for groundwater, to inform the competent authority to take action as required by applicable law.

11. For the exploitation phase:

1. To perform monthly monitoring by the evolution of the temperature regime of the river as a result of the discharge of the heated NPP "Kozloduy" and NNU waters before and after the discharge of exhaust cooling water by measuring water quantity and temperature of raw and waste water the discharge point of TC-1.

2. To perform individual monitoring of occupational exposure of workers in New Nuclear Unit in compliance with the current regulations in this area.

3. To implement a program for departmental/self-monitoring, according to the scope of item I. 1.1 and 1.2. In the event of unforeseen impacts should take adequate measures for their removal.

4. In order to reduce the adverse impact of invasive alien species (mussels, fish and other invertebrates), resulting from the warming of the water in the discharge of warm channels to provide:

- regular mechanical cleaning of hot channels, especially in the formation of blooms, overgrowth, clusters of mussels, as the waste is not disposed of in the Danube River;
- near the port serving the NPP "Kozloduy" no fouling ship fuel should enter without cleaning the overgrowth;
- ships waters for technical needs should be disposed only in special containers and no case in the Danube River.

5. To prepare and implement instruction regulating the procedure for reporting incidents important for safety in accordance with applicable regulatory requirements, interagency agreements and operational experience of NPP "Kozloduy".



6. In total radiation accident that could occur at the site of New Nuclear Unit, at an early stage of its occurrence to provide information to all local Romanian authorities in the area of influence, and to provide recommendations for the protection of the Romanian population in the same conditions under which it is done for the Bulgarian population.

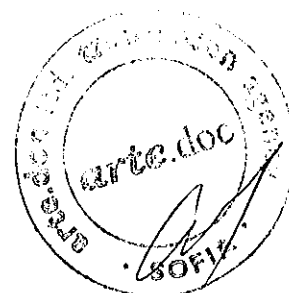
7. In order to inform the population of Romania, periodically needs to be informed of Romanian local authorities for monitoring results in the 30 km zone of impact of NPP "Kozloduy".

8. To provide the necessary data from the monitoring area of the New Nuclear Unit NPP "Kozloduy" in an agreement between Romania and the Republic of Bulgaria for a joint program for the exchange of information in real time (in the data submitted by automated stations) and in possible short time (data from manual/semi-automatic analysis) for information based on results of radiological, radiochemical, chemical and meteorological monitoring of the factors of the environment, biodiversity and human health.

9. To facilitate public access (including the Romanian population from border areas) containing information relating to the implementation of measures for environmental protection, to make accessible website *annual environmental report* in English. Information Annual Report relating to the 30 km zone of the NPP "Kozloduy", to be provided upon request in paper and electronic form to the Romanian local authorities.

III. Plan for implementation of measures under Article 96, paragraph 1, item 6 of the EPA.

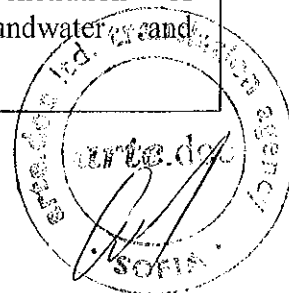
№	Description of measures	Period (stage) of the implementation	Result
1. Air, in accordance with applicable regulations, including:			
1.1	To develop a plan for organization of traffic flow to and from the site of the project. Scheme should be coordinated with the mayors of the municipalities and town halls. Scheme should provide for limiting passage through populated areas of heavy traffic. If this is unavoidable, to ensure the rapid and unimpeded passage through the settlement at a steady speed (without stopping and lowering the speed limit).	Construction (C) Operation (O) and Decommissioning (DC)	Limitation of emissions of exhaust gases in the atmosphere and minimize the negative impact on air quality in the area of the settlements.
1.2	Construction and transport equipment are maintained in good working order.	C, O, and DC	Air protection and health of workers and the population in the area.



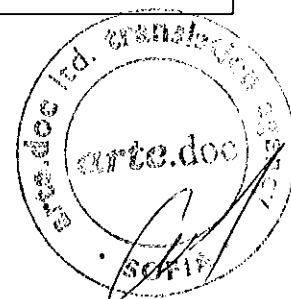
№	Description of measures	Period (stage) of the implementation	Result
1.3	Use of irrigation (mobile) system to prevent dust emissions in the operations (loading and unloading, excavation, embankment, etc.)	C DC	Reduce dusting air. Preservation of health of workers in the area.
1.4	Storage areas for bulk materials (mainly sand) and construction waste in dry and windy weather should be sprinkled.	C DC In appropriate weather conditions	
1.5	Vehicles are covered in the transport of excavated earth, building materials, construction waste, etc.	C DC	Prevent dust emissions.
1.6	Immediately after completion of works, storage areas for bulk materials to be cleaned.	Immediately after completion of C CE	Air Protection.

2. Surface and groundwater in accordance with the applicable legislation, including:

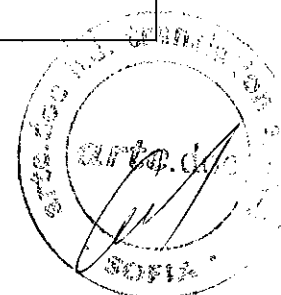
2.1	To the WWTP capacity for uptake and processing of the generated spot faecal waste water during the construction and operational phase of New Nuclear Unit to use toilets.	Design (D), C	Protection of waters from pollution.
2.2	Develop and follow the operating instructions for all treatment facilities.	O, DC	Optimal management of plant operation.
2.3	Do not allow water pollution during the construction, operation and decommissioning of the IP.	C, O, DC	Reduce to a minimum exposure to the object on water and biodiversity in the area.
2.4	The sewerage system to be filled with materials that provide a high degree of permeability.	D, C	Protection against penetration of pollutants into groundwater and subsurface.



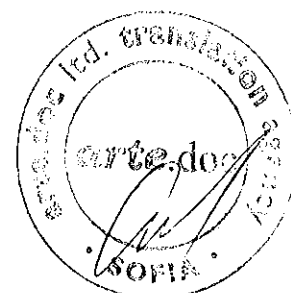
№	Description of measures	Period (stage) of the implementation	Result
2.5	Concrete equipment should be designed and constructed with waterproof concrete.	D, C	Prevent leaks. Preservation of soil and groundwater contamination.
2.6	To provide a special area for used construction equipment in a way no pollution of surface and groundwater with petroleum products.	D, C	Non-hydrocarbon contamination of soils and groundwater, surface water and soil.
2.7	Design and implementation of appropriate technical capacity to supply drinking water from the existing water supply system of the plant and technical water supply - water for cooling and other purposes of the existing hydraulic structures.	D, C	Reduce to the minimal impact of the site on the quantity and quality of water in the area.
2.8	To build a separate sewerage network household for manufacturing and rain water with buffer holding rainwater tanks.	D, C	Prevention of pollution of surface water and soil.
2.9	If necessary, to provide design and construction of drainage/water draining system for removal of water from the site. Drainage water to be discharged into the river. River after passing through retaining reservoir sedimentation and quality control.	D, C, O, DC	Protection from the harmful effects of water.
2.10	To develop new/changed existing licensing under the Water Act.	D, C, O, DC	Compliance with all legal requirements for protection of surface and groundwater.



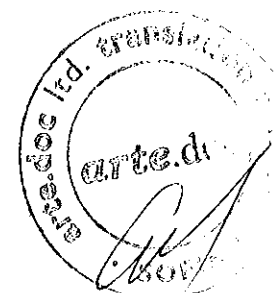
№	Description of measures	Period (stage) of the implementation	Result
2.11	Monitoring the level of groundwater in the area of Mute on plan agreed by the competent authority for water management.	D, C, O	Protection of the quantitative status of groundwater.
3. Subsoil, in accordance with applicable regulations, including:			
3.1	Design New Nuclear Unit to be based on actual engineering geological and hydrogeological studies and research.	D	Justified design solutions to prevent large and uneven tightness and protection of subsoil and groundwater.
3.2	To propose constructive solutions in accordance with the standards for seismic design and construction of nuclear power facilities resulting from the seismic characteristics of the site.	D	Bearing the maximum possible impact of the project seismic event without compromising the structural integrity of the equipment or prolonged loss of functionality.
3.3	To provide building cement bearing bed or other appropriate technical solution under the foundations of facilities New Nuclear Unit.	C	Increasing the bearing capacity of the ground, removing the subsidence of loess and establishing a barrier against the spread of radionuclide in depth,
3.4 1	To ensure maintenance of the projected level of groundwater.	O, DC	<ol style="list-style-type: none"> 1. Prevent the increase in NPV; 2. Save ground stability and prevent shortening the path of reaching radionuclides to groundwater.
4. Land and soil, in accordance with applicable regulations, including:			
4.1	Non-radiology aspect		
4.1.1	Humus is being stored separately from other land masses.	C	Preservation of the soil.
4.1.2	Using part of the excavated earth for back filling, shaping and violations of construction used in the reclamation of the site.	D, C	Phased rehabilitation of damaged areas.



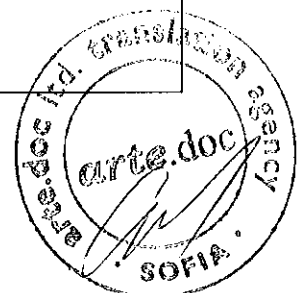
№	Description of measures	Period (stage) of the implementation	Result
4.1.3	Rehabilitation of the affected area of construction, deletion of temporary sites and landfills earth and restore disturbed soil and vegetation cover. Complete restoration of the damaged areas after the end of the operation of the NNU. After completion of the main construction to landscaping activities, which include local shrub and tree species.	C DC	Restoration of disturbed soil cover and landscape the area.
4.1.4	Strengthening damaged areas with native vegetation.	D, C	Save the characteristic vegetation of the area.
4.1.5	Maximum utilization of humus stocks with minimal disturbance of the soil in the neighbouring areas.	D, C	Soil protection is not only the site, but also on neighbouring adjacent lands.
4.1.6	Avoid going beyond the boundaries of the contours of the site.	C DC	
4.1.7	Avoid contamination of soil off-site construction materials.	C DC	Soil conservation.
4.1.8	Prevent storage of household waste in unorganized for this purpose.	C, O, DC	Soil conservation.
4.1.9	When choosing a new access roads and services of the selected site of New Nuclear Unit to be made for the free drainage of surface water and draining them.		Reducing the risk of floods and minimize the degradation processes such as swamping.
4.2	Radiological aspect		
4.2.1	Waiver of initial radiological status of the soils	D before C	Prevention for the population and environmental protection



№	Description of measures	Period (stage) of the implementation	Result
4.2.2	<p>In of soil pollution from NNU to reduce the penetration of radioactive isotopes from the soil into plants:</p> <p>*Soil liming;</p> <ul style="list-style-type: none"> - Introducing organic fertilizers; - fertilization and fertilization with micro; - application of methods using natural minerals - natural zeolites or the use of non-traditional chemicals. 	O, DC	<p>Preventing the production of safe food for people and animals.</p> <p>Minimizing the impact on the environment, soil and water.</p> <p>Prevention against radiation impacts on soil and water.</p>
4.2.3	<p>In of soil pollution from New Nuclear Unit to make recommendations for the selection of crops and varieties that less accumulated radioactive elements.</p>	O	<p>Minimizing the impact on the environment, soil and water.</p>
5. Landscape, in accordance with applicable regulations, including:			
5.1	<p>Decommissioning of New Nuclear Unit to provide for development of a project of landscaping the territory.</p>	DC	<p>Landscape conservation</p>
6. Biodiversity. Protected areas, in accordance with applicable regulations, including:			
6.1	<p>Conduct regular monitoring of the ecological status of the Danube River in the area of nuclear power.</p>	C, O	<p>Control of water quality and timely notification of the Ministry and other control authorities arising unregulated sources of pollution with organic and inert.</p>



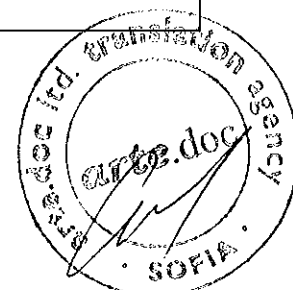
№	Description of measures	Period (stage) of the implementation	Result
6.2	Performance monitoring water for invasive foreign species in the port area of the NPP during construction and operation of the NNU.	C, O	Establishment of new aquatic alien invasive species early in the introduction to their notification to the relevant authorities and proposing measures for their destruction, as well as measures for the prevention and control in order to reduce the cumulative effects of navigation and the risk of encroachment.
6.3	Under the proposed afforestation and reclamation measures to use locally grown plants.	C, O, DC	Create favourable habitats for the small fauna and reduce the risk of spread of foreign species.
7. Waste management, and compliance with applicable regulations, including:			
7.1	To prepare a plan to perform management of construction waste	C DC	Establishing a framework for the management of construction waste.
7.2	To provide storage places for municipal waste, including until their transfer to subsequent treatment.	D, C, O	Preservation of the region and adjacent areas of contamination.
8. Dangerous substances, in accordance with applicable regulations, including:			
8.1	Development and implementation of guidelines for safe storage and use of the dangerous chemical substances and/or mixtures in accordance with the requirements of Safety Data Sheets provided by manufacturer/supplier.	C, O, DC	Preventing health risks to workers on site.
8.2	Compliance with all instructions for safe handling of dangerous substances. For construction site especially when laying asphalt pavement is necessary strict compliance with all requirements SIHFS.	C, O	Preventing health risks to workers on site.



№	Description of measures	Period (stage) of the implementation	Result
8.3	Reduction of possible adverse effects of hazardous substances is necessary to ensure the requirements for loading and unloading of powdered raw materials delivered in paper or polymer bags, proper storage of hazardous substances.	D, C, O, DC	Prevent pollution of environment. Preservation of health of workers.
8.4	Supplied raw materials for the operation of the site must be accompanied by an analysis of our certificates Safety data sheets, instructions for safe use, including to spills, atomization and harm to personnel. Each original packaging should be a label that contains data on health and environmental risks and safety measures.	C, O, DC	Preventing health risk for workers on site. Preservation of health of workers.

9. Harmful physical factors - noise, vibration, etc., In accordance with applicable regulations, including:

9.1	To provide for silencers mounted outside the production buildings fans, with noise emissions in order to meet the limit value for manufacturing and storage areas.	D, C	Compliance with the standard noise level for production and storage areas.
9.2	During the construction of the personal safety of noise load of workers is necessary the use of personal hearing protectors.	C DC	Preservation of health of workers and the population in the area.



№	Description of measures	Period (stage) of the implementation	Result
10. Health protection and risk management in accordance with applicable regulations, including:			
10.1	Compliance with all safety instructions, hygiene and fire safety (SIHFS) for different types of jobs.	D, C, O	Prevention of health risks.
10.2	All building repairs should comply with minimum requirements for health and safety in carrying out construction works.	C DC	Reducing health risks for workers.
10.3	Compliance with all the requirements of preventive health care in terms of physiological regimes of work and rest and physiological standards for manual handling of loads specified in the regulations of the Ministry of Health.	C, O, DC	Reducing health risks for workers.
10.4	Strictly use provided personal and collective protective equipment.	C, O, DC	Risk prevention.
10.5	Mandatory instruction for workers by competent specialists.	C, O, DC	Risk prevention.
10.6	Conducting medical check-ups.	C, O, DC	Prevention of workers and simultaneous diagnostics.
10.7	The regime of work and rest in vibration effects to be built so that the total exposure shift (contact vibration) cannot exceed 90 120 min.	C DC	Risk prevention.
10.8	In all professional activities must be used appropriately for the season clothing, personal protective equipment in the presence of harmful factors in the workplace (dust masks, ear muffs, anti-vibration gloves) and provide a rational regime of work and rest.	C, O, DC	Risk prevention.



№	Description of measures	Period (stage) of the implementation	Result
10.9	To keep up first aid kit.	C, O, DC	Promptly provide first aid to victims.
10:10	Update all programs and procedures in radiation protection.	O, DC	Reduce the radiological impact on the environment and personnel.

This decision relates only to the investment proposal, which was subject to an EIA under the Environment Protection Act. In extension or amendment of this investment proposal contracting authority must promptly notify MEW at the earliest possible stage.

On the basis article 99, paragraph 8 of the Environmental Protection Act, the EIA decision loses legal action if within 5/five/years from the date of issuance has not started implementation of the project.

In case of contracting new assignor in accordance with Article 99, paragraph 7 of the Environment Protection Act of the environment must inform the MoEW.

In case of non-fulfilment of the conditions and measures in the EIA guilty persons liable under Article 166 item 2 of the Environment Protection Act.

Interested parties can appeal the decision under the Administrative Procedure Code within 14 days of its announcement.

Date: 27.01.2015

MINISTER:/signature, stamp/
IVELINA VASILEVA

I, the undersigned Silviya Nikolova Gelusheva hereby certify the authenticity of the translation from Bulgarian into English language of the present document.
Translator:

