Kozloduy NPP EAD Information Leaflet for External Organisations

1. GENERAL INFORMATION ON KOZLODUY NPP EAD

Kozloduy NPP is the first nuclear power plant in Bulgaria and Southeast Europe. The plant is located in the Northwest part of the Republic of Bulgaria at about 3 km from the Danube River, 3.5 km to the south-east of the town of Kozloduy and 180 to the north from Sofia. Units 5 and 6 provide electricity and thermal energy generation. Two spent fuel storage facilities are located on the plant site - Dry Spent Fuel Storage Facility and Wet Spent Fuel Storage Facility.

Kozloduy NPP EAD mission is to supply the country and the region with electricity in a reliable way through safe, efficient and environmentally friendly generation at reasonable prices. The strategic goal of the company is the long-term operation of the nuclear power units and uprate of the thermal power of the reactor plants with guaranteed safe and reliable performance in compliance with the licenses issued by the regulatory bodies. As a holder of the licenses for operation Kozloduy NPP EAD bears full responsibility for the provision and management of the safety of the nuclear facilities, in compliance with the requirements and principles of nuclear safety and radiation protection with the aim to protect the human life, health and living conditions of present and future generations, environment and valuables against the harmful effects of ionizing radiation.

The active participation of the personnel, both of the company as well as the personnel of external organisations which provide services to the NPP is a key factor for the successful fulfilment of the Company's mission and its obligations as an operating organisation. For this purpose, it is necessary to build mutually beneficial relations and a fair partnership with the external organisations - suppliers and service providers for Kozloduy NPP EAD, satisfying the expectations of the external organisations as regards their relations with the Company without compromising safety. The basis for setting up such relationships is the presentation of objective information to the partners about the rules in force which must be observed by the external personnel when staying on the site and during the implementation of activities on facilities of Kozloduy NPP EAD.

This information leaflet is designed to serve as a practical guide to any external organisation to which the NPP has assigned the implementation of activities under a contract or an approved procurement. The leaflet provides answers to the most frequently asked question by the external organisations after they have been selected as contractors:

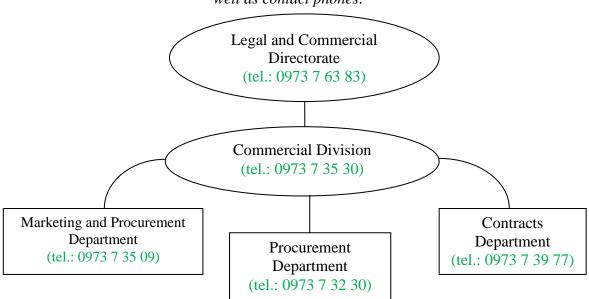
What shall I do now to provide access of the personnel to the site and start work?

2. WHAT YOU HAVE TO KNOW AS FUTURE PARTNERS OF THE COMPANY

Kozloduy NPP EAD outsources the implementation of activities related to design, supply, construction works, maintenance and repair, and other activities to external organisations, on the basis of a bilaterally signed contract or an approved procurement under the terms of the relevant current national legislation (Public Procurement Act).

The terms and conditions for preparation, conclusion, administration and management of contracts between Kozloduy NPP EAD and external organisations are defined in the internal procedure "Quality Procedure. Contract conclusion and management at Kozloduy NPP EAD", 10.УД.00.ИК.007. The Commercial Division is the structural unit responsible for the organisation of the process of conclusion of contracts through the Public Procurement Department, Contracts Department and Marketing and Procurement Department.

The figure bellow shows the position of the Commercial Division within the Company structure, as well as contact phones:



In terms of safety, the seconded personnel of external organisations, foreign companies included, are provisionally considered equivalent (except for the authorisation to issue work permits and admission to work) to Kozloduy NPP EAD personnel.

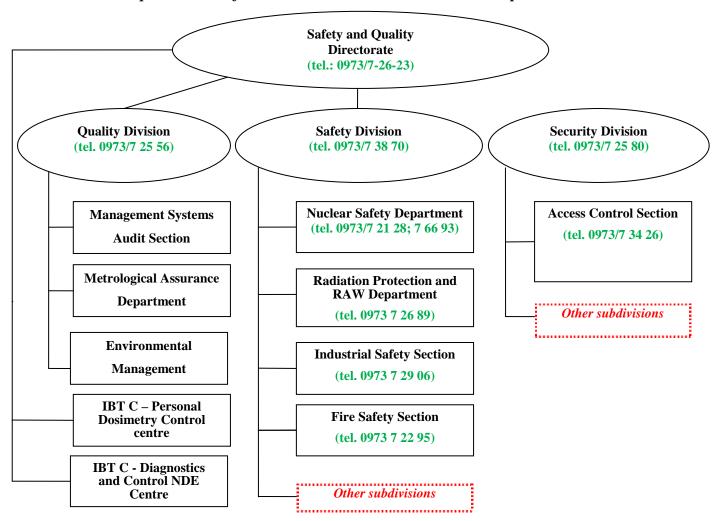
When performing the activity under the contract/procurement the management of the external organisation shall be liable for the health and safety and dose exposure of the personnel performing the activity as well as for their qualification groups in accordance with the 'Regulations on Safety at Work in Non-electric Installations of the Power Generating and Heat Generating Plants and in Heat Distribution Networks and Hydro Engineering Facilities' and 'Regulations on Health and Safety at Work in Electrical Installations of Power Generating and Heat Generating Plants and in Heat Distribution Facilities'. The manager is required to designate responsible persons for technical and fire safety and radiation protection for the activities under the contract/procurement.

The requirements for the subcontractors/third parties are the same as for the main Contractor, however, in the scope of their activity. The Contractor is obliged to ensure the preparation and submission of the documents required for the implementation of activities by the subcontractor/third party.

Any activity outsourced by Kozloduy NPP EAD is assessed in advance for its effect on:

- nuclear safety (NS), radiation protection (RP), emergency preparedness (EP), physical protection (PhP);
- industrial safety (IS), fire safety (FS), technical surveillance (TS);
- quality assurance (QA), metrological assurance (MA) and environmental management (EM)

General presentation of the directorate structure and contact telephone numbers:



The implementation of the activities by external organisations (EOs) shall begin after review, agreement and registration of the documents required by the Contracting Authority in the Central Archive Office. Sample forms of the required documents can be found at *Kozloduy NPP EAD Internet site Instructions for work of external organisations*.

The implementation of the activities by external organisations (EOs) for which a Document Review Sheet is required shall begin after its approval by the Safety and Quality Director. Where:

- 1) The Document Review Sheet shall be issued after a review of the required documents submitted by the EO.
- 2) The required documents and the deadline for their submission to the Safety and Quality Directorate are specified in the concluded contract.
- 3) The EO shall submit to the Safety and Quality Directorate the originals (on paper) of the required documents for review and agreement

4) If lists connected with the work permit system of Kozloduy NPP EAD are submitted, they shall be subject to review and approval by the officials specified in the sample forms thereto. After review and approval by Kozloduy NPP EAD, these lists shall be sent (scanned and in the original file format) to e-mail: *isoed@npp.bg*.

3. SITE ACCESS TO KOZLODUY NPP EAD

In order to ensure the physical protection of Kozloduy NPP EAD as a strategic site, a special regime has been introduced for controlled access of persons and motor vehicles, for bringing in and out inventories. Control checkpoints and/or checkpoints of the automatic access control system (AACS) for people and vehicles have been established at designated areas at Kozloduy NPP site. The access of individuals through the control checkpoints and the automatic access control system is provided via access identification cards.

The access of outside personnel to the plant site is based on an order of the Safety and Quality Director for access/work. The order content and form depend on the implemented activity. The work order is issued if there is a *concluded contract/approved procurement with Kozloduy NPP EAD and an approved Document Review Sheet*. The preparation of the order is a responsibility of the external organisation with the active assistance of the responsible person under the contract/procurement from the requesting administrative unit and the Investment Division (for contracts under the Investment Programme or for maintenance/repair of buildings and premises under the Maintenance Programme, outside Units 5 and 6 site). The work order is issued subject to verification of the compliance with the current normative requirements related to granting access to work in nuclear facilities performed by competent and authorised personnel of the Company, as well as certifying the preparedness of Kozloduy NPP EAD for the implementation of the activities by the external organisation.

The work order is issued after submission of the documents for request for work authorisation in the controlled and protected areas of Kozloduy NPP EAD in compliance with art.4 para.4 of the State Agency for National Security Act and art.40 i.2, art.44 and art.45 of the Regulation on the Implementation of the State Agency for National Security Act, and in accordance with Appendix No.11 of the Site Access Procedure at Kozloduy NPP EAD, УС.ФЗ.ИН.015. For individuals having a valid work authorisation, documents for a new authorisation shall be submitted 1 (one) month before the expiry of the work authorisation in the strategic areas of Kozloduy NPP EAD strategic site.

Activities connected with the preparation of the order and its further agreement

- 1. Preparation of the required documents listed in the contract between Kozloduy NPP EAD and EO (A LIST of the required documents which the EO has to submit to the Safety and Quality Directorate prior to commencement of work is used when preparing the documents)
- **2.** Submission of the prepared documents to the Safety and Quality Directorate for review, agreement and issuance of a document review sheet

(an order for work of the EO is issued only if there is an approved document review sheet)

- **3.** Submission of the required documents for issuance of a work authorisation for external personnel in compliance with art.4 para.4 of the State Agency for National Security Act and art.40 i.2, art.44 and art.45 of the Regulation on the Implementation of the State Agency for National Security Act, and in accordance with Appendix No.11 of the Site Access Procedure at Kozloduy NPP EAD, УС.ФЗ.ИН.015.
- (1. For individuals having a valid work authorisation, documents for a new authorisation shall be submitted 1 month before the expiry of the work authorisation in the strategic areas of Kozloduy NPP strategic site.
- (2. The work order is issued if an authorisation is granted by the State Agency for National Security) Information related to providing access to the site of the nuclear plant can be obtained from the Access Control Section officials, 0973-7-34 26/26 65
- **4.** Arrangements for checking the health status of the external personnel and confirmation of their ability to work in an environment with ionizing radiation, in accordance with the requirements of Regulation No. 11/10.2018 on health norms and requirements for working in an ionizing radiation environment.

Further information can be obtained from the Occupation Medical Centre of Kozloduy NPP EAD on: 0973-7-26 26

5. Organisation of the introductory briefing and training of the EO personnel at Kozloduy NPP EAD Personnel and Training Centre Division

Further information can be obtained from Training Centre Division personnel of Kozloduy NPP EAD on: 0973-7-39 89

6. Satisfying other conditions set as clauses in the signed contract with Kozloduy NPP EAD before signing the work order. Verification of the deadlines of the contract/procurement

Further information can be obtained from the Contracts Department personnel on: 0973 7 39 77/29 11/65 93

7. Preparation of the work order with the assistance of the Kozloduy NPP EAD responsible person and the Access Control Section officials

The telephone number of Kozloduy NPP EAD responsible persons are included in the contract/procurement; if needed, the telephone numbers of the Access Control Section are 0973 7 34 26/26 65

8. Arrangement for the agreement of the work order by the competent persons designated therein. The procedure for obtaining the signatures required for approval is in accordance with the current procedure on the access control at Kozloduy NPP EAD

The telephone number of Kozloduy NPP EAD responsible persons are included in the contract/procurement; if needed, the telephone numbers of the Access Control Section are 0973 7 34 26/26 65

The initial access procedure includes:

- 1) Registration of the work order/access in the Records Office located in the Administrative Building of Kozloduy NPP EAD, and distribution
- 2) Processing of the required documents for obtaining individual access cards to pass through the checkpoints of the automated access control system by the Access Control Office of Kozloduy NPP EAD
- 3) When working in the controlled area, performing individual dosimetric control by measuring the activity incorporated in human body for through whole body counting of each person at the Inspection Body Type C Personal Dosimetry Control Centre of Kozloduy NPP EAD
 - 4) Receiving an individual access card from the Access Control Office employees.

IMPORTANT INFORMATION:

- 1. The access to the Kozloduy NPP EAD area through the control check points (CCP) and to the site through the Automated Access Control System (AACS) is allowed only with access cards. The persons identify themselves at each automated access control point using their access cards.
- 2. A signed work order shall be presented to the Kozloduy NPP EAD Access Control Office for access cards to be issued

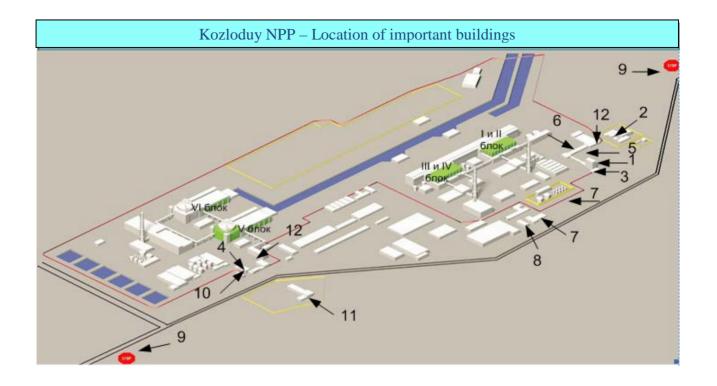
The access card shall be worn so that it can be easily seen when at the site of Kozloduy NPP EAD. Handing over the access card to another person is prohibited.

Visit only places you have been granted access to.

Objects and inventories taken in and out are checked at the Main Gates using a scanning device, portal metal detector, or manual metal detector. For taking inventories out of Kozloduy NPP EAD a written permit/inventory list is required. The permit/inventory list and the inventories are handed over to the health physicist on duty and police officer on duty.

4. LOCATION OF IMPORTANT BUILDINGS AT KOZLODUY NPP SITE

The following figure shows the location of important buildings at Kozloduy NPP site.



- 1. Kozloduy NPP EAD Administrative Building
- 2. KNPP Training Centre
- 3. Commercial Division
- 4. On-site Medical Service
- 5. Whole body counting
- 6. Access Control Office
- 7. Investment Division

- 8. Zavodski Stroezhi
- 9. Control Check-Point
- 10. Units 5-6 Administrative Building
- 11. On-site Fire Brigade
- 12.Units 5-6 Canteen

5. RULES ON PERSONNEL BEHAVIOUR AT KOZLODUY NPP EAD SITE

Safety signs

It is mandatory to follow the signs placed where the risk can not be prevented or minimized via the collective protective equipment, measures, methods, or procedures for work organisation.

Use of the radiation control monitors

It is **mandatory to pass through the radiation control monitors** according to the instructions. Your personal safety is your personal responsibility!

Work clothing and shoes

Work clothing and shoes are mandatory in the industrial and technological compartments of Kozloduy NPP EAD.

They are **not mandatory** in the offices and while going to and returning from the workplaces at the beginning and at the end of the work day.

In order to enter the workplaces at EP-2 it is mandatory to use the overhead passage from the Engineering and Laboratory Building (ELB) or the east and north entrances to the Turbine Halls.

Hard hats

The use of hard hats is **mandatory** inside all industrial and technological compartments and workplaces marked with a sign "Using a hard hat is mandatory".

The use of hard hats is **prohibited** in other compartments such as control rooms and workplaces with control panels marked with a sign prohibiting the use of hard hats.

In the CONTROLLED AREAS of EP-2 and Spent Fuel Storage Facility (SFSF) it is mandatory to use hard hats with a rotary knob, with increased reliability against falling off. The hard hats shall be yellow in colour, except for the Dosimetric Control Section personnel - their hard hats shall be red. All hard hats shall have a blue label "Controlled Area".

Ear muffs

Using ear muffs is **mandatory** at the places labelled "**Using ear muff is mandatory**". Dispensers with disposable internal ear muffs (ear plugs) are placed at the entrances of the turbine halls and in places where there is a real danger of hearing impairment.

Radio transmitters

Bringing in and using radio transmitters is prohibited in Kozloduy NPP EAD compartments marked with the corresponding sign.

Bringing radio transmitters in the CONTROLLED AREA is prohibited.

Smoking

Smoking is prohibited on the territory of Kozloduy NPP EAD, except for the places designated and labelled for this purpose.

Use of photo and video equipment

Photo and video shooting is prohibited on the territory of Kozloduy NPP EAD.

Bringing in personal laptops, cameras, video cameras, and taking photos in the protected area is allowed only with a special written authorisation.

6. GENERAL RULES DURING THE IMPLEMENTATION OF THE ACTIVITIES

Strictly follow all procedures and instructions.

Always use the required personal protective equipment.

Anticipate the possible dangerous situations and be prepared for them.

Discontinue work until all the inconsistencies are eliminated.

Collect household and industrial waste in accordance with the established procedures and at the designated places.

Place signs and labels to ensure safety when performing activities requiring this.

7. MANDATORY RULES IN THE CONTROLLED AREA

There are two areas established at the territory of Kozloduy NPP EAD for the purpose of preventing the spread of radioactive contamination – **controlled area** (CA) and supervised area (SA).

Special measures for radiation protection, occupational dose exposure monitoring, and contamination monitoring under normal operating conditions are required in the controlled area (CA). Measures to minimise the potential dose exposure of the personnel are provided.

The supervised area includes all rooms and premises at the EP-2 site outside the controlled area. Radiation monitoring of the work environment is performed in the SA, however, no special radiation protection measures for the personnel are required.

Strictly follow the access requirements for the CA.

Use special work clothing and personal protective equipment in compliance with the instructions.

Follow the designated route to your workplace - DO NOT STRAY AND DO NOT OPEN DOORS OF COMPARTMENTS WHERE YOU HAVE NO WORK TO DO.

Carry your access card and individual dosimeters at all times.

Keep them safe them from damage or loss.

Follow the readings of the electronic alarm dosimeter.

Do not exceed the permissible dose and time for work.

Use the sanitary barriers strictly and in accordance with the instructions.

Strictly follow the individual hygiene rules.

PROHIBITIONS IN FORCE IN THE CONTROLLED AREA:

- Entering without the basic personal protective equipment.
- Bringing in objects and property not related to the performance of the official duties.
- Bringing in cigarettes, bags, book, newspapers, magazines, drugs, cosmetics, mobile phones, etc.
- Bringing in food and drinks.
- Passing from "hot" to "clean" changing room in special protective clothing and work shoes.
- Passing from "clean" to "hot" changing room in personal clothes and shoes.
- Opening the emergency doors (except in the event of an emergency) and deliberately damaging or switching off the radiation monitoring instrumentation.
- Passing to the "clean" changing room upon radioactive contamination signal from the monitors at the exit of the showering facility.
- Staying in the Controlled Area without a clear assignment.
- Pouring out radioactive solutions in the sewage system.
- Drinking water at places not designated for that purpose.

8. ACTIONS IN CASE OF EMERGENCY

Follow the orders of the Emergency Response Manager announced by the speaker system. Use the emergency kits only on their order.

In case of an emergency you will hear a message on the speakers at the site. Follow the order you hear on the speakers!

Upon "Sheltering" order: The sheltering is in the ELB Shelter and the inhabited buildings (for the rest of the personnel) using, where possible, ground level floor rooms or inside rooms with airtight windows and doors.

Upon "**Iodine prophylaxis**" and "**Use of emergency kit**" order: The cabinets with Emergency kits and potassium iodine pills are located in all administrative and industrial buildings. Take an emergency kit and two potassium iodine pills from the closest cabinet!

Upon "Evacuation" order: Follow the signs to the nearest exit and the nearest evacuation gathering point.

9. SAFETY CULTURE

Safety culture is a set of characteristics of the organisation and the behaviour of the individuals in it which show that all safety issues are of paramount importance and receive attention commensurate to their importance.

Safety culture is:

- To have clear formulation of the tasks assigned and to perform them accurately and thoroughly;
- To know what you are doing and to understand why you have to do it in a certain way;
- To fully understand the safety requirements of the activity and to be ready to deal with potential problems that could arise;
- To do things correctly even when no one is watching.

The high safety culture depends on all of us:

- Everyone is personally responsible for their safety and for the safety of others.
- All activities are carried out according to procedures or programmes.
- Follow procedures and rules and require control from your supervisor!
- Be critical and self-critical!
- Make conservative decisions!
- If you are not confident at work, stop and let your manager know!
- Avoid hasty decisions and actions!
- Ask questions, discuss issues that are of interest to you!