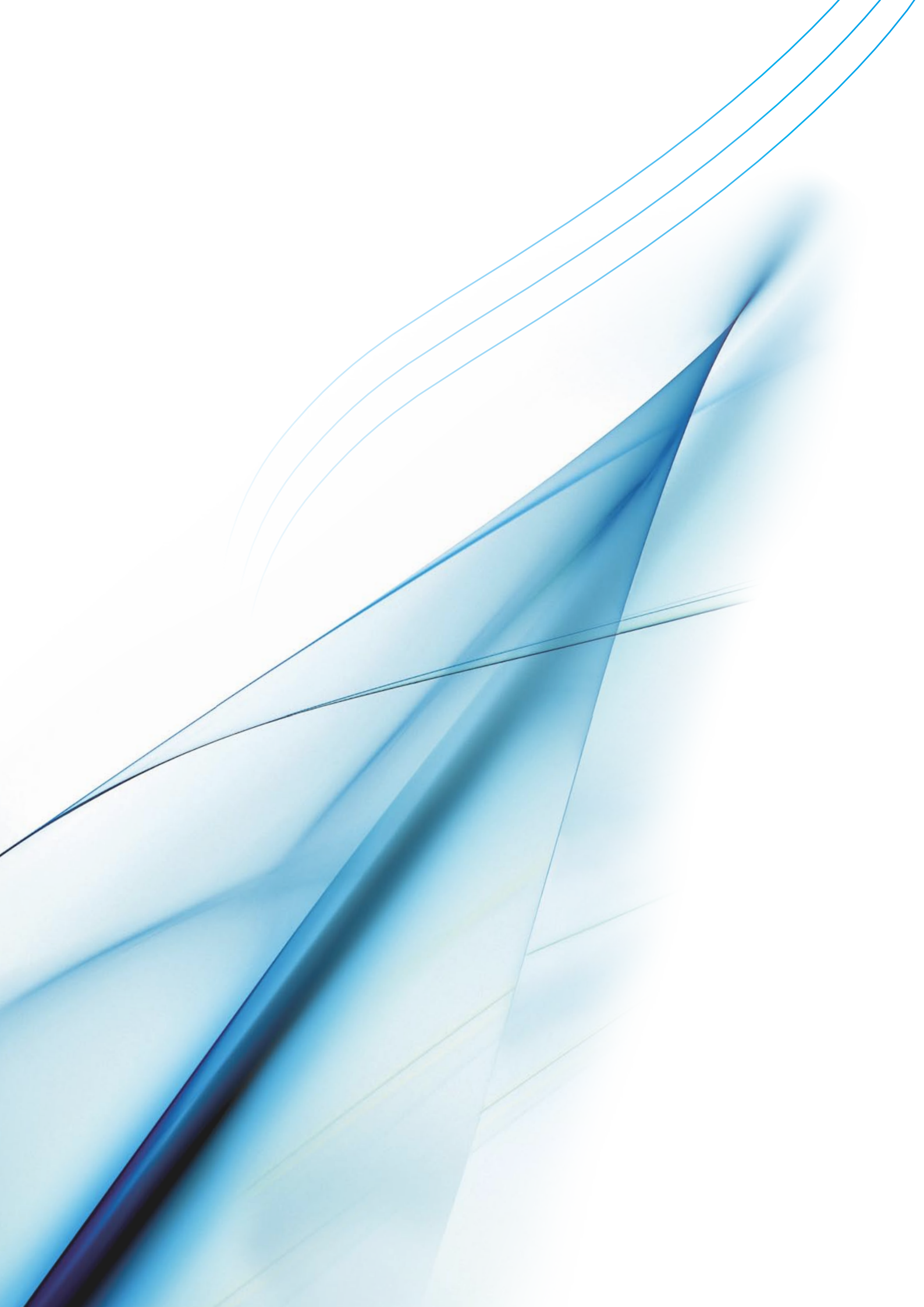
KOZLODUY NPP PLC

2010
ANNUAL REPORT



DEAR READERS,

For me and my colleagues at Kozloduy NPP, the year 2010 was the latest in the series of successful years of professional achievements and overcoming challenges, which is a logical outcome of the long operating experience and competence of the Plant power operators.

Definitely, the year can be considered successful in terms of all tasks set in our Business Programme. The established performance indicators, in terms of electricity and heat generation, and the planned financial parameters were achieved. Apart from the contribution to ensuring the national energy balance, the significant share of over 33% of the national electricity generation continued to be a factor for sustaining an acceptable price for the consumers in Bulgaria.

The clear rules which we apply to our electricity sale tenders at the liberalized market have proved the prestige of the company as a reputable partner and a reliable electricity supplier.

I would like to emphasize that our efforts to achieve high production and economic results do not shift the top priority in our work – the continuous improving and enhancing safety throughout the operation of the nuclear installations. In wholeheartedly pursuit of this goal, no events with negative impact on safety were identified last year.

Considering the important role of Kozloduy NPP for the national economy and taking into account the international trend for lifetime extension of nuclear installation, within last year we commenced activities to prepare the operating lifetime extension of Units 5 and 6. We shall do our best so that the two 1000 MW Units achieve the state enabling their operating lifetime extension by 20 years each.

I believe thus we shall be able to meet the increasing demand for reliable, accessible and clean energy for the Bulgarian economy, we shall continue to spare to the environment millions of tons emissions and shall further contribute to the protection of the environment for the sake of the future generations.

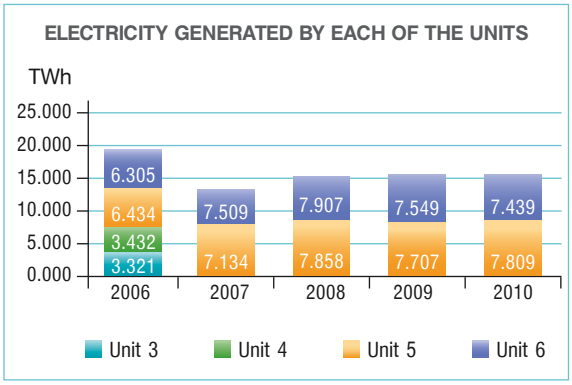
KOSTADIN DIMITROV
EXECUTIVE DIRECTOR
OF KOZLODUY NPP PLC

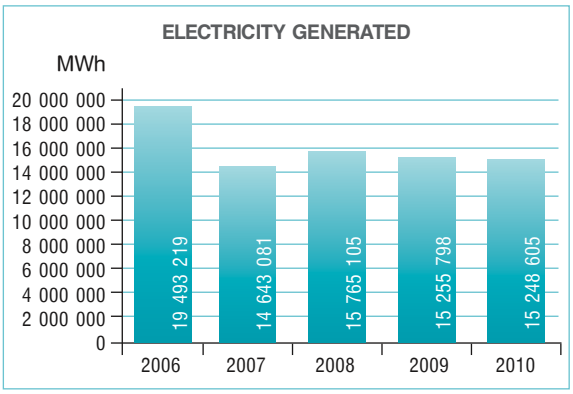
ELECTRICITY GENERATION (GROSS)

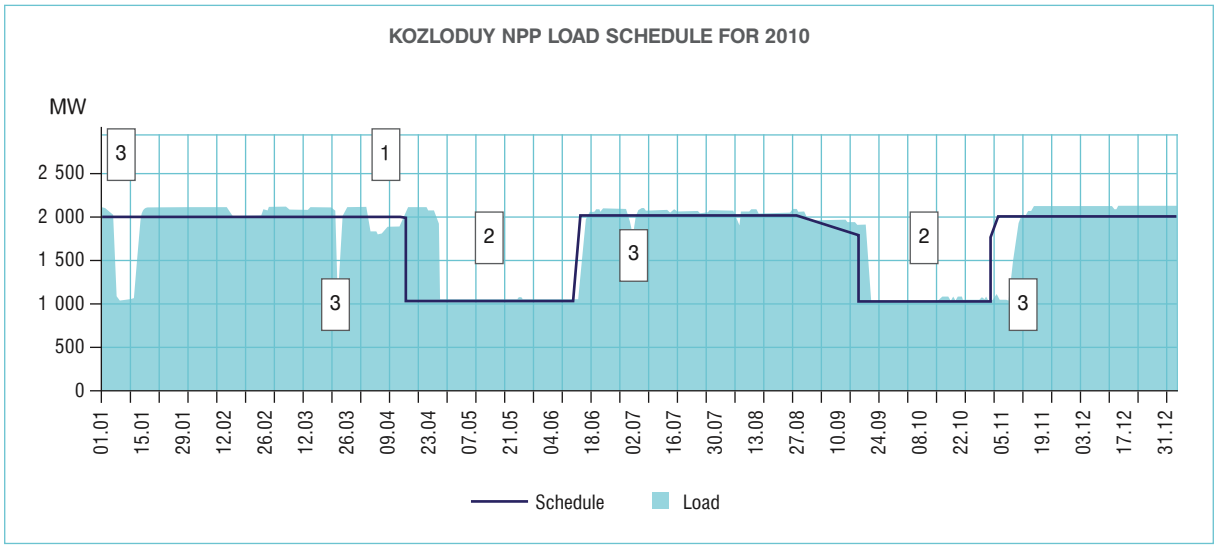
Throughout 2010 Kozloduy NPP generated 15 248 605 MWh electricity (gross). The electricity generated by the 1000 MW Units 5 and 6 is commensurate with the generation during the last four years after the shutdown of the 440 MW Units 3 and 4 at the end of 2006.

Since the commissioning of Unit 1 in July 1974, the nuclear power plant has generated 492 546 038 MWh electricity by the end of 2010, adhering to all the requirements for safe operation of the nuclear facilities and without any impact on the environment.

During the last year, the 1000 MW Units 5 and 6 were operated in compliance with the load schedule agreed with the Electricity System Operator and updated on-line in accordance with the procedures laid down in the Regulations for Grid Management.
The electricity generated by Kozloduy NPP throughout 2010 accounted for 33.13% of the national electricity generation.

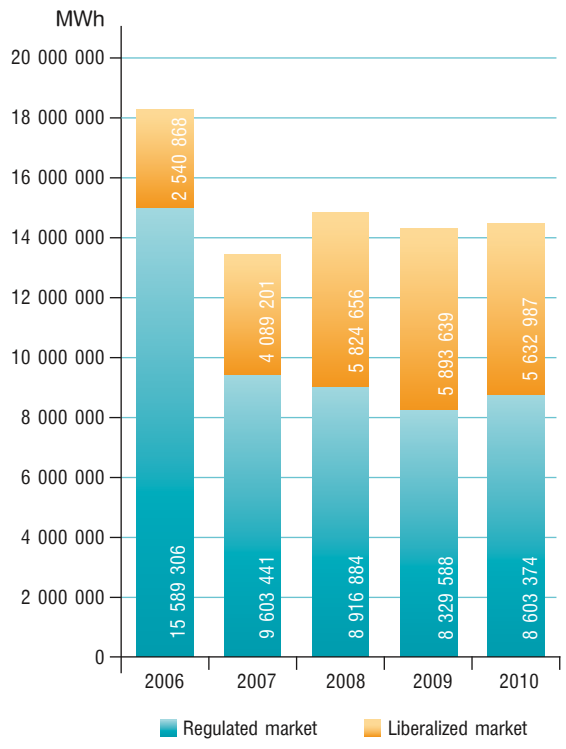






Key:
1. Dispatcher's Load Schedule
2. Planned annual outage
3. Deviation (shutdown/power drop/outage extension)

ELECTRICITY SOLD BY KOZLODUY NPP ON THE REGULATED AND LIBERALIZED MARKET



ELECTRICITY SOLD (NET)

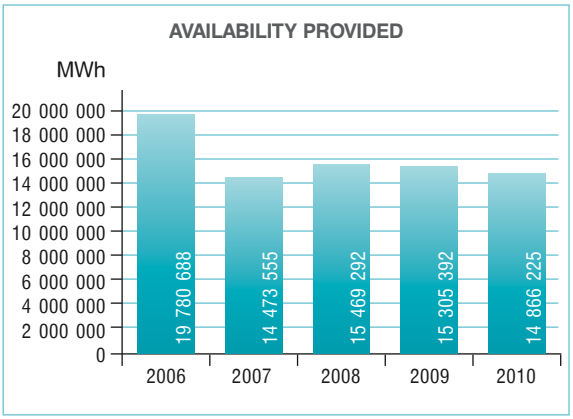
The active net electricity supplied to the national grid amounted to 14 236 361 MWh for the last year.

8 603 374 MWh (60% of the total net generation) were supplied to the regulated market in order to meet the demand of the “eligible” consumers.

On the liberalized market, based on bilateral contracts with big industrial enterprises and electricity traders, after the tenders were held, 40% of the total net generation were sold (5 632 987 MWh).

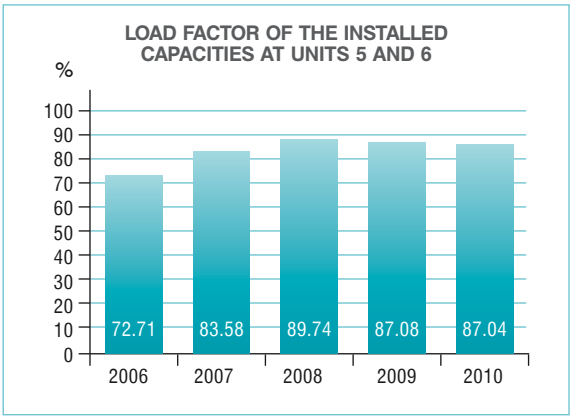
AVAILABILITY

Along with the net electricity supply for satisfying the country demand, Kozloduy NPP provided for a gross availability amounted to 14 866 225 MWh for the control and security of the electricity grid throughout the year.



LOAD FACTOR

The Load Factor of Units 5 and 6 throughout 2010 accounted for 87.04%. This indicator characterizes the operation level of the nuclear installations in terms of reliability of operation and optimization of the operations and maintenance activities. The values reported for the past years at Kozloduy NPP exceeded the worldwide average values regarding PWR nuclear reactors (analogous to WWER).



MAINTENANCE PROGRAMME

The annual outages, including refuelling, of Units 5 and 6 were performed in 47 and 49 calendar days, respectively, considered from the day of shutting down the turbine generator to the day of its connection to the grid. The activities planned for equipment maintenance and modernization were performed within the required scope and quality.
Within the scheduled outage downtimes a project on replacement of the equipment of Unit 5 control safety systems (in two of the system trains) and replacement of high pressure SG feedwater heaters of Unit 6 was implemented.

HEAT GENERATION

In parallel with its main business activity – electricity generation, Kozloduy NPP is engaged in heat generation too, which is necessary for providing normal working conditions for the personnel and equipment (including those at the shutdown units) and satisfying the demand of the town of Kozloduy. 61% of the heat generated was used for the plant in-house needs.
The heat generated and supplied to the end consumers (households, industrial enterprises, etc.) throughout 2010 amounted to 79 011 MWh.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LICENSING REGIME

The activity of Kozloduy NPP PLC is subject to state supervision by the Bulgarian Nuclear Regulatory Agency (BNRA) for the office of the Council of Ministers of the Republic of Bulgaria, Ministry of the Environment and Waters (MEW) and Ministry of Health.

The nuclear facilities of the nuclear power plant are operated according to the provisions of the operating licenses issued by the BNRA.

The construction of a new nuclear facility, the Dry Spent Fuel Storage Facility, designed for 5 256 spent nuclear fuel assemblies from the WWER-440 reactors continued at the site of Kozloduy NPP. The works for the new storage facility are performed in compliance with the permits issued by the BNRA. The performance of the operations related to the manipulation and loading of the CONSTOR 440/84 type casks designed for the new site with spent nuclear fuel from the existing Spent Nuclear Fuel Storage Facility (SNFSF) imposed the change of the operating license during the year.

In connection with the decision of the Council of Ministers (No 839 of December 2008) for declaring the Units 1 and 2 for radioactive waste (RAW) management facilities, on 18 October 2010, the BNRA terminated the operating licenses of Units 1 and 2 with the license holder Kozloduy NPP. The operating licenses for both units in their capacity of RAW management facilities, which are subject to decommissioning, were issued by the State Enterprise Radioactive Waste.

In May, 2010, the procedure for renewal of the operating license of Unit 3 in the E operating mode was launched.

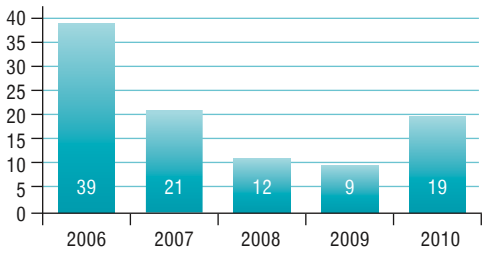
At the beginning of the year, the three licenses for the usage of the sources of ionizing radiation in fire detectors were renewed. The validity of the renewed licenses is 5 years.

During the year 48 permissions for performing modification were granted by the BNRA, which resulted into changes in the structures, systems and equipment (implementation of technical solutions) and the internal rules for performance of the activities related to safety of the nuclear facilities at the site of Kozloduy NPP.

NUCLEAR SAFETY

In 2010, nineteen operating events reported to the BNRA occurred at Kozloduy NPP. All events were classified at level 0 (deviation) according to the INES Scale.
The only reactor SCRAM at Kozloduy NPP was registered on 21 March 2010 at Unit 6. The previous occurrence of reactor SCRAM at this unit was 13 years and 3 months ago.
The value of the SCRAMs for reactor for 7000 hours of operation for 2010 is 0.46, which according to the WANO (World Association of Nuclear Operators), is similar to the average values for this reactor type.

EVENTS ACCORDING TO THE INES SCALE REPORTED TO THE BULGARIAN NUCLEAR REGULATORY AGENCY



RADIATION PROTECTION

The consistent application of the ALARA principle to minimize the exposure dose is the basis of the policy of Kozloduy NPP for management of radiation protection activities. The precise dosimetry and radiation monitoring, the application of modern methods for maintenance of the systems and facilities, strict preplanning and preparation of the maintenance operations are basis for the good results achieved in this area over the years.

In 2010, the annual limit on the effective dose of occupational radiation exposure of 50 mSv, as well as the limit of 100 mSv over a five-year period, as specified in the Basic Standards for Radiation Protection (BSRP) of 2004, was not exceeded.
The maximal individual effective dose is 21% of the annual limit. The average dose exposure for the personnel is 0.27 mSv. In 2010, the average collective dose of the two units of operation (WWER-1000) is 0.43 manSv/unit and is lower than the average value of 0.55 manSv/unit for the indicator for PWR reactors based on the information from the WANO 2009 Performance Indicators Report.

SPENT FUEL AND RADIOACTIVE WASTE MANAGEMENT

All activities for management of spent nuclear fuel and radioactive waste at Kozloduy NPP are in compliance with the National Strategy for Management of Spent Nuclear Fuel and Radioactive Waste.
The spent nuclear fuel is stored at the site of

Kozloduy NPP adhering to all safety requirements and it is monitored by the inspectors of the Bulgarian Nuclear Regulatory Agency, the International Atomic Energy Agency (IAEA) and EURATOM.

In 2010 eleven routine inspections were conducted by the IAEA and the BNRA inspectors to review the compliance with safeguards of the Non-Proliferation Treaty; in 10 the EURATOM inspectors took part as well. Neither violations nor non-compliances were found concerning the amounts of nuclear materials declared and available during the reviews.

50 reports for inventory changes of nuclear materials were sent to the BNRA and EURATOM – Inventory Change Reports (ICR), and 8 reports for the annual inventory of nuclear fuel – Physical Inventory Listing (PIL) and Material Balance Report (MBR) at Kozloduy NPP. These reports are required according to the BNRA Regulation on the conditions and procedure for submitting information to keep records for the activities which are subject to the safeguards of the Non-Proliferation Treaty and Regulation No 302/2005 of the European Commission on the implementation of the EURATOM safeguards.

In 2010, there was no transportation of spent nuclear fuel for reprocessing to Russia.

The liquid and solid radioactive waste generated from the operation of the nuclear power plant is handed over to the Specialised Enterprise Radioactive Waste of Kozloduy for treatment.

PHYSICAL PROTECTION

In 2010, no violations of the physical protection of the nuclear power plant were reported. The conclusions from the regular inspections by the BNRA and the Ministry of Interior confirm that the plant physical protection system performs its basic functions and provides response to design basis threat. Four technical solutions were implemented over the year in order to improve the efficiency ofw the physical protection including:

– Technical security systems at the Dry Spent Fuel Storage Facility;

– The notification system at the site of Kozloduy NPP and within the 12 km zone;

– Separation of the protection zone between the sites of Electricity Production – 1 and Electricity Production – 2.

EMERGENCY PLANNING AND PREPAREDNESS

Two general emergency exercises for preparation of the personnel of the nuclear power plant to respond to the emergency plan were carried out in 2010.
The first of the planned exercises involving the accident with magnitude of 6.9 according to the MSK-64 scale and leakage from At-the-reactor Spent Fuel Storage Pool and Spent Fuel Storage Facility was carried out in May. The on-duty emergency teams took part into the exercise and the new notification system was tested.
The second emergency exercise with the emergency event Accident with rupture of Dy850 pipeline and bypass of the containment of Unit 5 at Kozloduy NPP was conducted in December. In the course of the exercise, the reliability of communication and coordination of the activities between the teams in the Emergency Control Centre and Main Control Room 5 was evaluated. This was verified on the WWER-1000 Full-Scope Simulator at the Training Centre.
The necessary individual protection equipment was provided for those who work at the site of Kozloduy NPP and in the precautionary protective zone.

FIRE SAFETY

The modern level of fire safety at the site of Kozloduy NPP is maintained as a result of the established set of technical and organizational measures which provide the proper protection of the personnel and safety system, and reduce the possibility for fire occurrence.
In order to improve the efficiency and upgrade the fire detection and fire extinguishing systems, additional technical measures were applied consistently taking into consideration the scientific and technical achievements and applying the international experience in that field.
The status of fire safety and the actions of the plant personnel involved were highly assessed during the periodical reviews performed by the supervisory authorities – Directorate General Fire Safety and Protection of Population for the office of the Ministry of Interior.

RADIOECOLOGICAL MONITORING

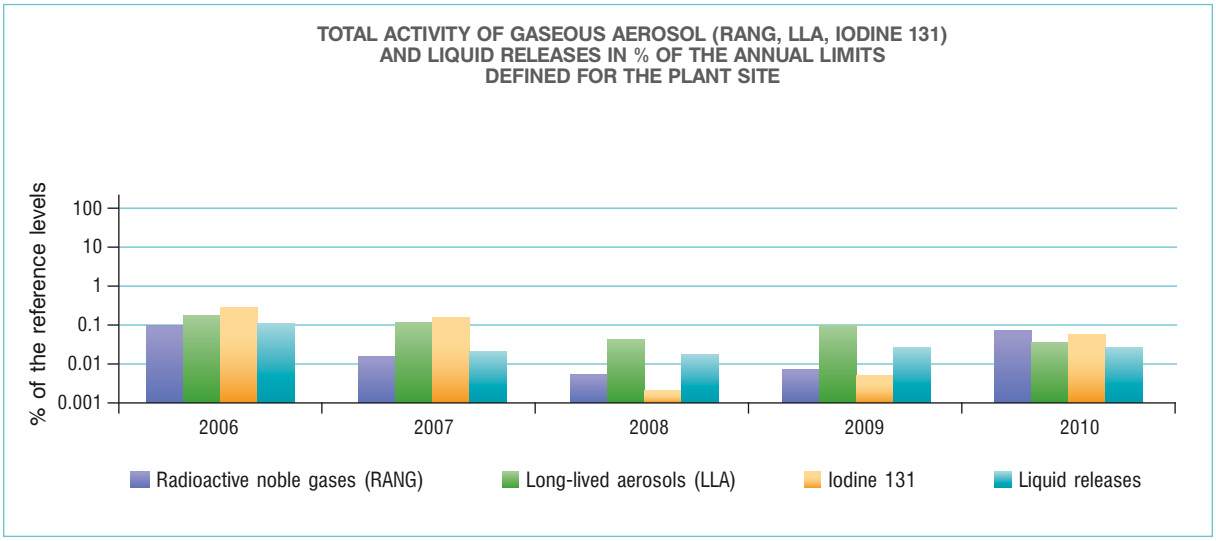
The radioecological monitoring at Kozloduy NPP fully complies with the national and European regulatory requirements including Article 35 of the EURATOM Treaty, recommendations of EU 2000/473/EURATOM and 2004/2/EURATOM.
The monitoring zone in the 100 km area surrounding the nuclear power plant and the monitoring covers the main components important to protection of the public health and the environment.
Over 3 800 analyses of more than 2 200 samples from various environmental components (air, water, soil, vegetation, milk, fish, cultivated crops etc.) from the monitoring area were made. The obtained results for the radiation indications are within the background levels which are typical for this area. Facilities at the industrial site of Kozloduy NPP are also subject to a comprehensive radioecological monitoring.
The gamma background levels at the on-site controlled points and the controlled posts within the 100 km zone for 2010 are fully comparable and do not differ from the natural gamma radiation background typical for the area.

The airborne man-caused activity is close to the background levels (averaged 2.8 μBq/m^3) and is much lower than the limits according to the BSRP of 2004.
The total beta activity of the airborne depositions in the monitoring area surrounding Kozloduy NPP is 0.48 Bq/(m^2.d). The results are similar to those from previous years and are within the natural limits for this radiation parameter.
The total beta activity, as measured in the waters of the Ogosta and Tsibritsa rivers, as well as the Kozloduy dam ranges from 0.025 to 0.15 Bq/l, this being 20% of the statutory limit (0.75 Bq/l). No impact was found as a result of Kozloduy NPP operation on the radiation situation of the natural water ponds in the region. The tritium content of the samples is within the limits of minimum detectable activity of 7.0 Bq/l.
Monitoring of drinking water samples showed that the total beta activity ranges between 0.023 and 0.087 Bq/l. Those values are much lower than the admissible limits for drinking water as set forth in Regulation No 9 of 16.03.2001 (2 Bq/l total beta activity and 100 Bq/l for tritium). The tritium content is within the limits of minimum detectable activity of average 5.3 Bq/l.
No man-caused activity was registered in soils in the 100 km monitoring area generated by Kozloduy NPP. The man-caused activity in the vegetation analysed is within the standard limits – ^{137}Cs to 2.54 Bq/kg and ^{90}Sr – to 2.39 Bq/kg (dry weight).
The same year the participation into four renowned international laboratory comparisons arranged by ALMERA – IAEA and BfS – Germany and NPL – Great Britain highly recognized the high level of the laboratory practice and quality of the radioecological monitoring performed at Kozloduy NPP.

GASEOUS AEROSOL AND LIQUID RADIOACTIVE DISCHARGES

The monitoring of the radioactive discharges is aimed to avoid the harmful impact of the ionizing radiation on the population and the environment.
The data from the monitoring of the liquid and gaseous discharges to the environment show that the trend of the amount of released to the environment radioactive material being much below the statutory limits continues. The statutory annual dose of the individual dose exposure of the population resulted from liquid and gaseous discharges totalled 250 μSv.
A reference level of 50 μSv for liquid and gaseous discharges has been introduced to Kozloduy NPP since 2007 in order to optimize the radiation protection. The annual activity limits of the discharges are based on these reference levels so that the received dose exposure will not exceed the reference level. Those limits are approved by the BNRA and agreed with the Ministry of Health and with the Ministry of the Environment and Waters.
In 2010 the determination of carbon 14 and tritium in gaseous emissions from Units 5 and 6, as well the on-line isotope gamma spectrometry of the radioactive noble gases in gaseous discharges. Thus, the improvement of the gaseous discharge monitoring is achieved in compliance with the requirements of the European Commission in this area. At the end of the year the project for optimization of the WWER-440 type reactor liquid and gaseous discharge radiological monitoring system was completed.
In 2010 the content of the radioactive substances in the gaseous discharges to the atmosphere also continues to be significantly lower than the plant administrative limits. The discharges of the radioactive noble gases

and iodine 131 are approximately 0.2%, and the aerosol discharges are about 0.07% of the corresponding annual discharge limits at the site of Kozloduy NPP.
The content of carbon 14 and tritium in the gaseous discharges from operated Units 5 and 6 is 2.1% for carbon 14 and 0.23% for tritium of the corresponding annual limits. In the past 2010 the content of the radioactive substances in the liquid discharges continues to be significantly lower than the permissible limits. The total activity of the waste waters discharged to the Danube River is about 0.2% of the permissible annual limits.



MONITORING OF PUBLIC DOSE EXPOSURE

To assess the additional dose exposure of the public, modelled programmes are applied based on the adopted by the European Union CREAM methodology using conservative exposure assessment and considering the hydrological and meteorological conditions and demographic data for Kozloduy NPP area.
Over the past 10 years, the values of the maximum individual effective dose of the public within the 30 km area varies from 2.5 ÷ 5 μSv/a, which is 500 times lower than the exposure resulting from the natural radiation background (2 400 μSv/a).
For 2010 the total assessment of the maximum individual dose rate for a critical group of the public from liquid releases and gaseous aerosol discharges to the environment considering carbon 14 and tritium, accounts for 5 μSv/a, which is negligibly low compared to the annual limit for the public (1 000 μSv) under The Basic Standards for Radiation Protection of 2004. The collective dose of the public within the monitoring area

surrounding Kozloduy NPP is 0.019 manSv. The statutory collective dose of 0.011 manSv/GW.a is completely comparable with the average values for PWR reactors worldwide – UNSCEAR 2000.

ENVIRONMENTAL PROTECTION – NON-RADIOLOGICAL ASPECTS

Kozloduy NPP concern for clean nature is found in all aspects including the non-radiological aspects of the activities related to environmental protection. The main objective is to adhere strictly to the regulatory requirements and conditions as set in the permits issued by the Ministry of Environment and Water (MEW), Danube Region Basin Directorate – Pleven, and Regional Inspectorate of Environment and Waters (RIEW) – Vratsa. Over 400 samples of underground and waste waters at the nuclear power plant site and the non-radioactive waste storage facility have been analyzed within the plant non-radioactive monitoring programmes. After the accreditation of the Engineering Chemistry Laboratory at Electricity Production – 1, since 2010, some of the tests have been performed by this laboratory and the rest have been performed by off-site accredited laboratory. Along with this monitoring, there is also plant monitoring performed by the plant laboratories. The results from over 3000 analyses show that the values of the monitored indicators are close to the previous years' values. The annual report on the results from the plant environmental non-radiological monitoring within Kozloduy NPP region has been submitted to the Environmental Executive Agency and Regional Inspectorate of Environment and Waters – Vratsa.

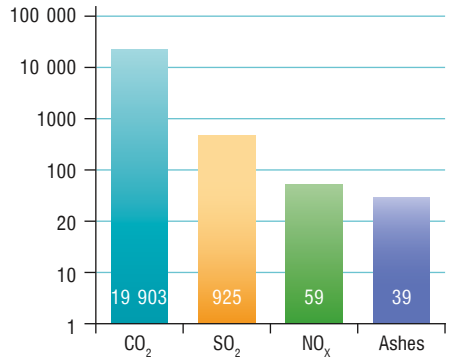
In 2010 by the decisions of the Director of the Danube Region Basin Directorate of Pleven, two modifications in the permits for Kozloduy NPP waste waters discharge were submitted being valid by 2016 and 2013 correspondingly.

Documents for modifications, update and extension of the permit validity for waste activities were submitted in November 2010 to the Regional Inspectorate on Environment and Waters of Vratsa.

An investment intention of Kozloduy NPP PLC was agreed with the Ministry of Environment and Waters to construct a waste water module cleaning facility at the Ledenika Health and Recreation Centre. Based on this, the necessary documents to open the procedure for issuing the permit according to the Waters Law were prepared.

12 planned inspections conducted by the MEW, RIEW of Vratsa and the Danube Region Waters Directorate proved that the company has taken the proper actions for prevention and solution of environmental problems.

EMISSIONS OF GREENHOUSE GASES SAVED IN 2010 BY KOZLODUY NPP COMPARED TO CONVENTIONAL COAL-FIRED ELECTRICITY GENERATING PLANTS (IN THOUSANDS OF TONS)



INVESTMENT PROGRAMME

For 2010 the allocated investment expenses of Kozloduy NPP PLC, financed by its own resources, amounted to BGN 124 741 thousand.
A prevailing part – around 87% from the total expenses for acquiring long-term assets by own resources – is aimed at financing measures providing reliable, safe and effective operation of Units 5 and 6.
Within the outages of the two 1000 MW units in 2010 the investment activities with a priority concerning the nuclear facilities modernization process were performed. Replacement of first and third control safety systems at Unit 5 with digital analogues was implemented and therefore the modernization of the control safety systems at the two units was completed. Within the new systems all IAEA and Bulgarian legislation requirements have been considered.
Among the large-scale modernization activities, financed by own resources, is the supply and replacement of high pressure heaters at Unit 6. As a result of the replacement additional electricity generation has been achieved owing to the increased effectiveness of feedwater heating, improved secondary water-chemistry, optimized heat exchange characteristics of the steam generator, reduction of maintenance expenses and duration.
The other part of the resources concerning the investment programme activities, financed by own resources, has been allocated for activities related to the gradual implementation of the modernization measures and safety enhancement of the Spent Fuel Storage Facility; implementation of measures for maintaining and enhancement of KNPP security and physical protection; modernization of facilities under the programme on Switchyard reliability enhancement; update of Full-Scope Simulator (FSS) – 1000 related to the exceeding of its functionality and use complying to the requirement to be in compliance with the referent Unit 6.
In 2010 the gradual implementation of measures for enhancement of the efficiency and quality of the heat supply for the needs of the town of Kozloduy and Kozloduy NPP continued.
The structure of the allocated resources is as follows: construction and installation works – BGN 24 436 thousand, equipment and facilities – BGN 87 544 thousand, research and development works – BGN 12 555 thousand, other – BGN 206 thousand.
Investment expenses on spare parts and capitalized maintenance amount to BGN 10 339 thousand.
The total value of the applied in 2010 long-term assets amount to BGN 119 154 thousand including BGN 117 158 thousand own resources funding. The rest are financed by the Nuclear Facilities Decommissioning National Fund and Kozloduy International Decommissioning Support Fund. The applied long-term assets are approved by governmental acceptance committees or internal acceptance committee. Some of them are as follows:
– Replacement of Unified Complex of Technical Connections of safety systems with a process-technical complex – I and III control safety system at Unit 5;
– Installation of high pressure heaters type (PVN-K)-6RD21,22,11,12W01 at Unit 6;
– Reconstruction of the building for boron acid preparation outside Auxiliary Building-3;
– Second independent electricity supply 0,4 kV of Kozloduy NPP PLC Hostel No1;
– Heating, ventilation and air-conditioning installation of the House of Culture, electricity supply reconstruction;
– Replacement of pipelines from the yard heat supply network of the town of Kozloduy with pre-insulated pipes for tracing free-of-channel – 11 sections.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FINANCIAL PERFORMANCE

In 2010 the financial dimensions of the activity of Kozloduy NPP represented in the annual reports – the financial performance, comprehensive income and cash flow demonstrated sustainability in maintaining good financial results.

The company's profit for 2010 after the tax expenses amounted to BGN 60 437 thousand (BGN 65 042 thousand for 2009) being influenced by the following basic negative factors in comparison to 2009:

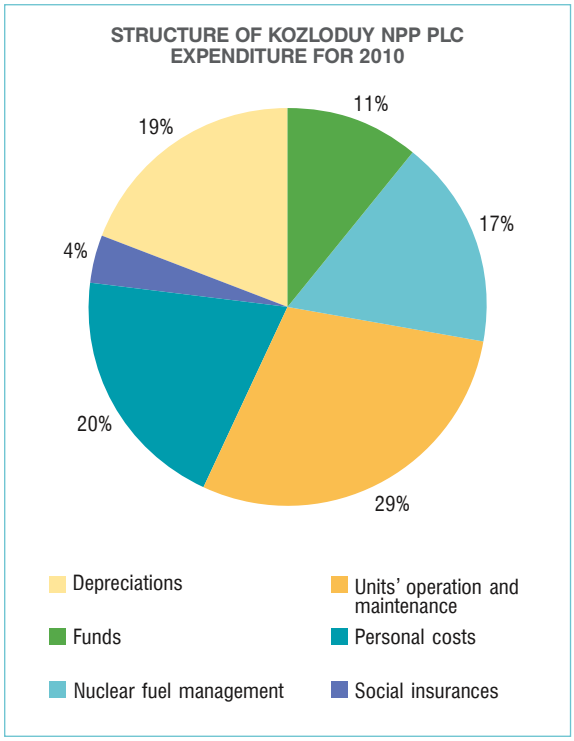
– increase of the share at the regulated market by 15.1% as from 1st July 2010;

– reduction of the average sales cost at the liberalized market by 2.19 BGN/MWh.

In 2010, the profits amount to BGN 809 107 thousand, whereas the profits from sales (of electrical energy, heat energy, goods and services) amount to BGN 749 557 thousand, external funding – BGN 43 597 thousand and sales from other services, materials and long-term tangible assets – BGN 15 953 thousand.

Kozloduy NPP production expenses for 2010 amount to BGN 732 171 thousand.

The structure components of the expenditure maintain their relative weight. The largest share in the structure of the expenditure is for maintenance of the units, depreciations, nuclear fuel and payments to the Radioactive Waste Safe Storage Fund (RAW SSF) and Nuclear Facilities Decommissioning Fund (NFDF).



The expenses for the RAW SSF and NFDF, depreciations and social insurances are based on the statutory rates. The expenditure for operations of the units is managed following the unconditional priority of ensuring safe operation of Units 5 and 6.

The analysis of results achieved in 2010 shows that the company's policy performed for improving the management of the processes for planning and budgeting, revenues management, expenditure and financial risks through improving the system for financial management and control, as well as their software support contributes to sustaining a good financial performance. All this provides the performance of the normal economic activity and completion of the fiscal year without any delayed payments. All payments according to the labour and social legislation to the personnel were made strictly following the statutory requirements.

BGN 41 737 thousand were paid to the social funds in 2010. All taxes and fees due to the State Budget totalled to BGN 239 148 thousand, the overheads to the RAW Safe Storage Fund and Nuclear Facilities Decommissioning Fund amount to BGN 88 736 thousand.

The due dividend for 2009 for the sole proprietor of the share capital amounts to BGN 46 830 thousand. As of 31 December 2010, the dividend amounting to BGN 39 025 thousand was paid, whereas the payment of BGN 7 805 thousand will be made in 2011.

The future prospects of Kozloduy NPP development are connected to the implementation of the strategic and operating objectives established in the three-year business programme for the period 2011 to 2013, improving the operating safety, providing economic and financial stability and human factor management.

The company owns and will maintain the required financial resource for ensuring promptly its obligations accrued by the performed activities.

STATEMENT OF FINANCIAL POSITION OF KOZLODUY NPP PLC, KOZLODUY AS OF 31ST DECEMBER 2010

Description	Current year (BGN thousand)	Previous year (BGN thousand)
ASSETS		
Non-current assets		
Long-term tangible assets	1 174 642	1 188 247
Intangible assets	6 461	10 870
Financial assets	232	232
Investments in subsidiaries	1 161	1 161
Loans granted	17 504	11 419
Assets in the process of construction	241 625	186 726
Total of non-current assets	**1 441 625**	**1 398 655**
Current assets		
Inventories	283 810	251 868
Trade and other receivables	247 154	188 396
Cash and cash equivalents	72 822	79 641
Current tax receivables		1 322
Deferred expenses	377	40
Total of current assets	**604 163**	**521 267**
Total of assets	**2 045 788**	**1 919 922**
Liabilities and Equity		
Equity		
Share capital	101 716	101 716
Reserves	991 174	984 671
Retained earnings from previous years	82 585	70 561
Retained earnings from current period	60 437	65 042
Total of equity	**1 235 912**	**1 221 990**
LIABILITIES		
Non-current liabilities		
Long-term bank loans	352 538	382 630
Deferred tax liabilities	37 723	46 105
Long-term provisions	19 541	13 578
Deferred income and funding for long-term assets	177 720	117 726
Other non-current liabilities	7 176	4 482
Total of non-current liabilities	**594 698**	**564 521**
Current liabilities		
Trade and other payables	63 938	56 965
Current portion of long-term payables	35 504	33 562
Current tax payables	19 160	12 785
Short-term provisions	85 255	17 814
Deferred income and funding current activities	11 321	12 285
Total of current liabilities	**215 178**	**133 411**
Total of liabilities	**809 876**	**697 932**
Total of liabilities and equity	**2 045 788**	**1 919 922**
Contingent assets	47 443	47 390

STATEMENT OF COMPREHENSIVE INCOME OF KOZLODUY NPP PLC, KOZLODUY FOR 2010

Description	Current year (BGN thousand)	Previous year (BGN thousand)
Profit from sales	749 557	748 472
Other revenues	59 550	80 644
Changes in inventories of finished goods and work in progress	24 453	(7 947)
Cost of goods and long-term assets sold	(544)	(816)
Own work capitalized	838	434
Raw materials and consumables used	(164 082)	(138 998)
Expenses on hired services	(108 866)	(154 034)
Depreciation costs	(138 034)	(142 530)
Salaries and wages	(147 648)	(138 491)
Social insurance costs	(30 900)	(31 002)
Other costs	(167 039)	(133 881)
including provisions	(85 323)	(7 834)
Financial income/costs	(11 136)	(10 052)
Income from subsidiaries	789	389
Profit/loss before tax	66 938	72 188
Tax expenses	6 501	7 146
Profit/loss for the period	60 437	65 042

DECOMMISSIONING

The management of the activities related to the shutdown 440 MW Units of Kozloduy NPP complies with Units 1-4 Decommissioning Strategy developed and updated in 2006. A review of the Updated Strategy was carried out in 2010 and the Decommissioning Activities Conceptual Schedule was updated too.

In compliance with the requirements of the State Regulations on obtaining licences for decommissioning of the shutdown Units the following fundamental documents were developed over the last year:

– Kozloduy NPP Units 1 and 2 Decommissioning Plan;

– Kozloduy NPP Units 3 and 4 Decommissioning Plan;

– Updated Safety Analysis Report (USAR) for Phase 1 (Units 1 and 2);

– Report on the Environmental Impact Assessment for Decommissioning of Units 1-4 at Kozloduy NPP.

The Decommissioning Projects being implemented throughout the year were more than 30. The following are the largest ones:

– Construction of Dry Spent Fuel Storage Facility (DSFSF).

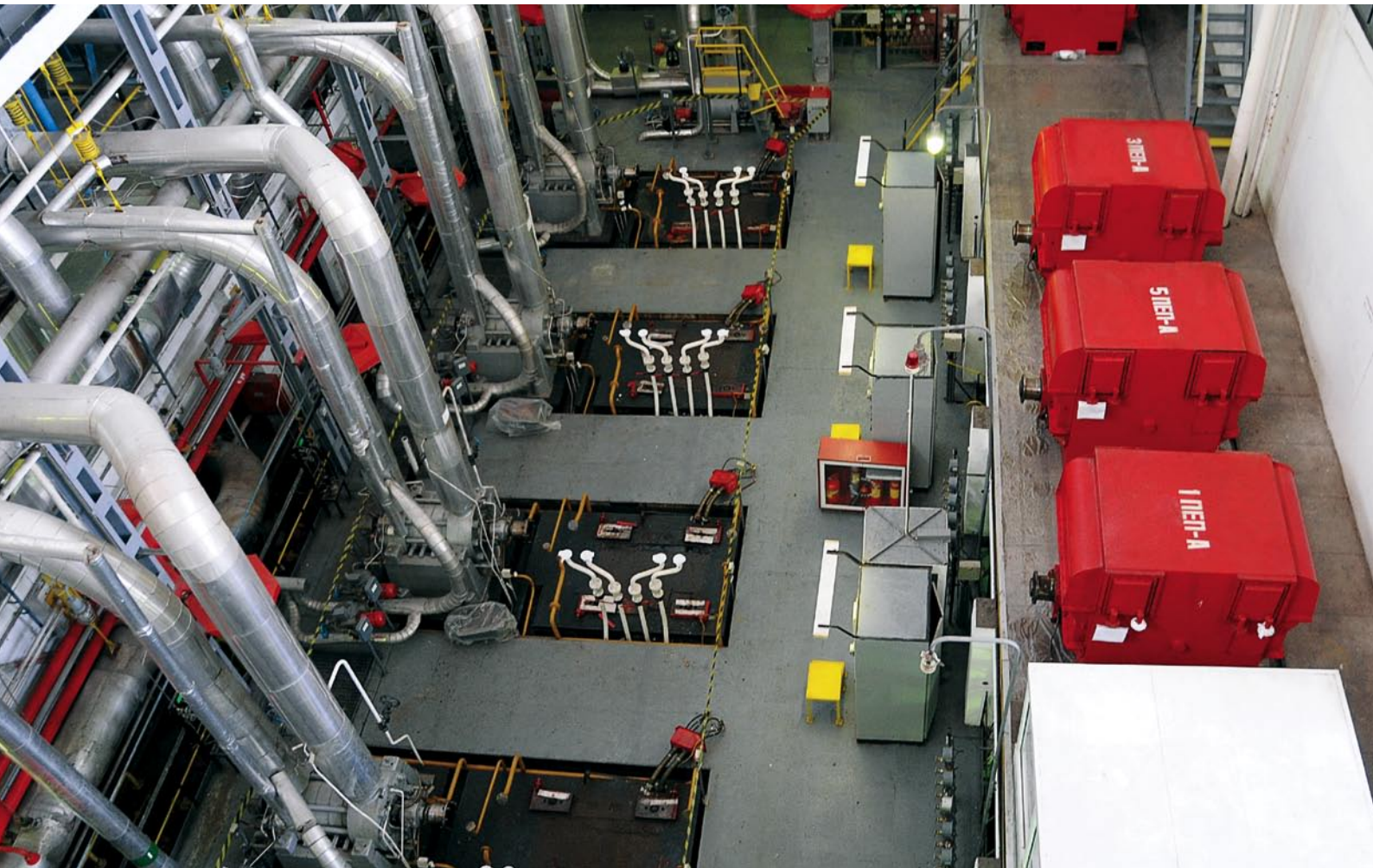
Dry storage is one of the internationally approved and applied technologies for long-term storage of spent nuclear fuel. The construction of the Storage Facility is implemented by the German Consortium NUKEM TECHNOLOGIES GmbH – GNS GmbH.

The construction works were completed and a 145 t crane which will service the facility was commissioned. After being tested in compliance with the requirements, 34 casks of the type CONSTOR were delivered in 2010. They were intended for fifty-year storage of spent nuclear fuel assemblies from the Units with WWER-440. The complex tests of the equipment were successful and a personnel training was conducted.

The construction commissioning, after the issuance of the operation licence required, is expected in 2012.

– Facility of High Volume Reduction Factor and Immobilization of Solid RAW (Plasma-Melting Facility).

The project provides technological solutions, equipment construction, and construction and commissioning of facility for treatment of low level solid radioactive wastes by means of melting using plasma arc.



The Project Contractor – IBERDROLA Ingenieria y Construccion S.A.U. (Spain), with subcontractor Belgoprocess (Belgium), developed a Technical Design and Interim Safety Analysis Report.
– Facility for Retrieval and Processing of the Solidified Phase from Evaporator Concentrate Tanks.
The project implementation enables solidified phase characterization, design and construction of the equipment, construction and commissioning of facility for safe retrieval and processing of the solidified phase from evaporator concentrate tanks.
The Conceptual and Detailed Designs for Phase One, including sampling and characterization of the solidified phase from evaporator concentrate tanks, were developed by the Project Contractor Onet Technologies Grands Projects (France).
A training of operation and maintenance personnel on the use of the sampling equipment was conducted in October.
Concerning the projects to be implemented over the next years, a number of preparatory activities have been carried out e.g. development of technical specifications for supply of equipment, review and investigation of tender documentation, assessment of the bids submitted, etc.

INTERNATIONAL COOPERATION

The development of the contemporary nuclear power is based on a striving for providing higher level of safety and reliability of nuclear facilities, and the pursuit of this priority is carried out in the terms of partnership, openness and experience sharing.

Through the realization of a great number of international projects, active cooperation with world organizations and participation in different measures, Kozloduy NPP is working to achieve maximum transparency in every sphere of its activity.

COOPERATION WITH WANO

The mission of the World Association of Nuclear Operators – WANO is the nuclear power plants operation safety and reliability to reach the highest possible level through exchange of information, encourage communication, benchmarking and competition among the members of the organization. The most important WANO tool for achieving this mission is accomplishment of the Peer Reviews Programme.

Hosting Peer Reviews is of paramount importance to every NPP since they help demonstrate openness and transparency in the overall activity, perform independent NPP safety assessment, share experience and information with nuclear power plants all over the world. The Peer Reviews provide the opportunity to WANO members to compare the level of operation in their power plants with the best world practices by objective analyses of the operation from independent international groups. All this contributes to continuous improvement of the safety level. The outcome of the WANO Peer Reviews is a report, reflecting the strengths as identified as well as the areas for improvement.

After the WANO Peer Review in June 2009 at Kozloduy NPP Units 5 and 6, the WANO experts found a number of strengths and good practices. At the same time based on the huge experience gained, the WANO team pointed out the areas in which improvements can be made, with intention to enhance Units 5 and 6 safety and reliability. In order to address appropriately the findings of the Peer Review, and after the analyses performed, a programme was developed including tangible measures. In 2010 the planned corrective measures were fulfilled and for this reason an organization was created, and conditions provided for control and documentation of activities, information distribution, etc. Referring to the programme implementation, based on INSAG-15 Key Practical Issues in Strengthening Safety Culture, “Guideline on Safety Culture” was developed, expected to improve the safety culture of medium management and operational personnel.

Throughout 2010 experts from the Bulgarian nuclear power plant participated in WANO Peer Reviews in Loviisa NPP – Finland, Emsland NPP – Germany, Sendai NPP – Japan, South Ukrainian NPP and some other plants. During these missions valuable practical experience was gained, deemed to be useful for the future international reviews at Kozloduy NPP.

COOPERATION WITH IAEA

Bulgaria, as a member of the International Atomic Energy Agency fulfils the safety requirements and participates in the review initiatives of their performance.

One of the IAEA tools is the review of the operational safety by a group of experts with proven experience and authority to conduct OSART (Operational Safety Assessment Review Team) missions. The IAEA OSART mission at Units 5 and 6 planned for 2012

requires even greater efforts on behalf of Kozloduy NPP as the international requirements are ever growing and changing.
In 2010 a programme was developed, containing the required activities related to the successful preparation of the forthcoming OSART mission. Performing the programme activities Kozloduy NPP is able to verify the high level of Units 5 and 6 operational safety.

PARTNERSHIP WITH NATIONAL AND INTERNATIONAL ORGANIZATIONS

Kozloduy NPP carries out its activity in close cooperation with a number of international and national government and non-government organizations – World Nuclear Association, FORATOM, BULATOM, Bulgarian Economic Forum Association, Interatomenergo, etc.
Throughout the year the participation of the Company representatives in international conferences, workshops and meetings continues, such as the conducted in Greece meeting "Individual dosimetry monitoring – IM2010", organized by the European Commission, the IAEA and the Greece Nuclear Energy Committee; a regional workshop for the Eastern European countries entitled "Influence of organizational changes on the integrated management system and safety culture", held in September at the Ledenika Health and Recreation Centre; forums intending to accustom with the tendencies and prospects of power energy growth in world scale – "Moscow week of the power energy" and meeting in Sofia of the Governing board of the Bulgarian National Committee in the World Power Energy Council; "First meeting of the working groups for consultation regarding the International guide for the lessons learned from total aging", organized by the IAEA and held in Vienna at the beginning of September; organized by FORATOM and IAEA workshop in Vienna "Applying a successful management system", etc.

HUMAN RESOURCE MANAGEMENT

The high professional standards focus the attention on the people working in this field. That very attention and concern become the basis of the human resource management policy of Kozloduy NPP. Its main objective is to maintain a substantial number of qualified, highly trained and motivated personnel.

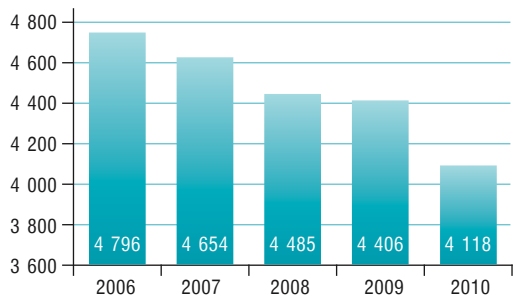
PERSONNEL STRUCTURE

Since the establishment in 2000 of Kozloduy NPP PLC as an independent commercial company certain measures for setting up the number of personnel in compliance with the good international practices in this field have been initiated. As a result of the dismissal of workers and employees who have reached retirement age which persisted throughout 2010, encouragement of voluntary retirement and optimization of the payroll at the end of 2010 the number of the company personnel is 4 118 people.

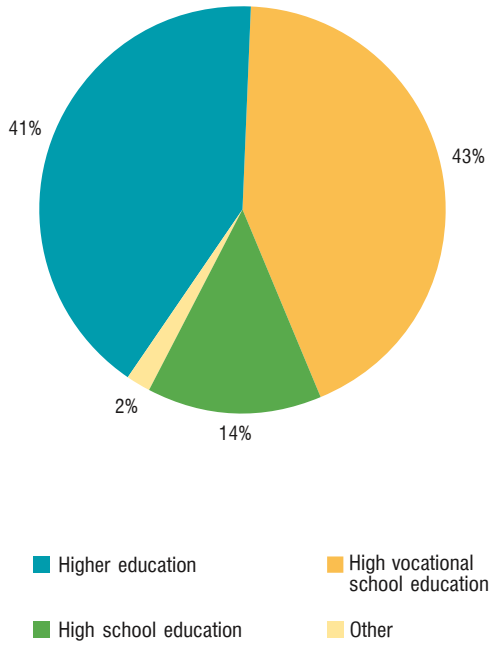
The reduction of the payroll compared to 2009 is mainly due to the retirement of 203 people in 2010. Since 1st November 2010, 99 workers and employees have been transferred to SE "RAW" pursuant to Council of Ministers' Decree for Units 1 and 2 decommissioning activities implementation.

Kozloduy NPP personnel have high educational background. 41% of the people have higher education. The lowest educational level required for the company payroll is high school education.

NUMBER OF KOZLODUY NPP PERSONNEL



EDUCATIONAL STRUCTURE OF PERSONNEL



TRAINING

The main objective of the company training and qualification system is to ensure a quality training of the personnel, involved in the operation of Kozloduy NPP PLC nuclear facilities. The training is performed in the Training Centre (TC), where all up-to-date conditions have been established and maintained.

The Centre is licensed for performing a specialized training on activities in nuclear facilities, which have an impact on safety, including those related to ensuring and control of nuclear safety and radiation protection and issuing certificates of competence to perform works with sources of ionizing radiation.

Individuals on licensed job positions are trained on individual programmes according the established training and qualification system. Therefore in 2010, 52 programmes for initial training and 317 programmes for continuous training were prepared. Their implementation was provided with 110 training courses in different areas – regulatory requirements, radiation protection and nuclear safety, technology and operating modes, emergency planning, human factor, utilization of information systems, etc. Simulator training has been provided for the employees using a Full-Scope Simulator for WWER-1000 (FSS-1000) reactors and Multi-functional Simulator for WWER-440 (MFS-440) reactors. 294 individuals from the licensed personnel have been trained in total of 29 802 man-hours.

For maintaining the Full-Scope Simulator-1000 in compliance with the referent Unit 6, a number of projects are under implementation.

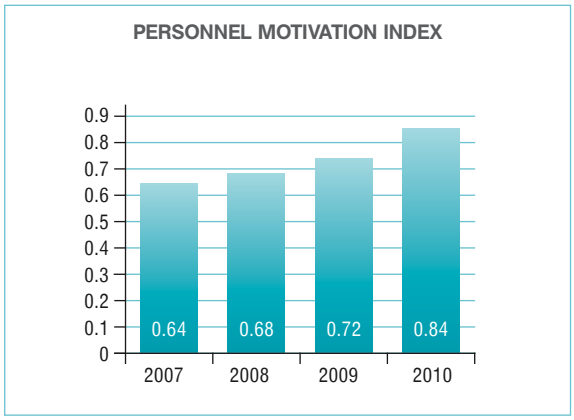
At the beginning of 2010 a project for improvement of the neutron-physics model of the core and thermo-hydraulic model of the primary circuit, steam generators, main steam pipelines and containment of FSS-1000 was initiated. This project is aimed at enhancing simulator functions to the modern technological and software achievements and reaching the most important simulator models to the high-precision model for engineer analyses.

25 modifications in FSS-1000 configuration have been implemented aiming at improving the compliance between FSS-1000 and its referent Unit 6. The projects on developing a simulator model of the post accident monitoring system – PAMS and the safety parameter display system – SPDS have been completed. The utilization of FSS-1000 has been extended as a tool for technical analyses and engineering tasks. Throughout 2010 the power symptom-based emergency procedures (new sixth revision) and low power symptom-based emergency procedures (prior to unit commissioning) were validated.
The training system was also applied to the rest of the job positions considering the requirements of the regulatory documents and the specifics of the job descriptions. For the training of the personnel outside the scope of the licence, individual training programmes for initial training have been developed. In 2010 72 typical training programmes were initiated and 83 synopses were elaborated. Throughout the year the training courses or course topics for the entire personnel included 38 738 man-participations.

The Training Centre provides training for access to the working place and on radiation protection to all sub-contractors, performing activities at the plant site. 320 courses were conducted and 6 179 individuals were trained during the year.
In compliance with the Licence obtained, the Training Centre performs specialized training and issues certificates of competence to external organizations personnel to perform activities with sources of ionizing radiation. In 2010 55 individuals were trained, 17 of which acquired and validated their competence to perform activities with sources of ionizing radiation.

SOCIAL RESPONSIBILITY

Kozloduy NPP PLC supports the principles included in the United Nations Global Compact regarding human rights, adherence to working standards, responsibility towards the environment, and encouragement of the policy for transparency in the activities.
The company extends each year the measures applied for sustaining and enhancing employees' qualification, corporate provision, and social protection of the people working at the plant.
The equality, the respect for personality, the protection of employees' rights and ensuring high social status are among the main management principles. Sex, racial, religious or political discrimination at the workplace is not allowed.
By its policy of encouraging personnel development, the plant provides equal opportunities for work and career development considering exclusively the employees' enterprise, professional qualification, experience gained, and personal skills, as well as the results at work achieved. Adhering to the



educational and qualification requirements for the respective job position, the plant employees are given priority over external candidates when filling vacancies.

To achieve the company objectives an Action Plan has been elaborated including a number of activities to sustain and increase personnel motivation and personal commitment. Since 2007 personnel motivation study has been performed yearly. It is used to assess the attitude towards work environment components. The results of 2010 show actual increase of plant employee and workers' motivation.

The company has Occupational Medical Centre on site where obligatory periodic medical examinations of personnel are performed, employees' health status is analyzed, and measures for improving the working conditions are developed and provided in order to minimize the risks to their health. All Kozloduy NPP employees are provided with additional voluntary health insurance, additional voluntary pension provision, possibilities to recover in a recreation centre, etc.

The low values of the industrial injuries indicators at Kozloduy NPP prove the effectiveness of the measures to sustain modern health and safe labour conditions and provide protection and prophylaxis for occupational risks. The plant industrial injury factor is 0.28 for 2010, and the average value for the utility – 2.20. The stable trend towards low number of industrial injuries having direct impact on the production activity continues throughout 2010.

It is the sixth time Kozloduy NPP PLC organizes a paid summer student internship programme which gives the young people from different specialities the opportunity to gain practical experience in real working environment. 25 students took part in this programme and over 200 students passed unpaid internships. The internship programme as a direct connection between the higher education and business is the possibility to perform preliminary selection of well-prepared specialists – future Kozloduy NPP employees.

An essential element of Kozloduy NPP social policy is the support and development of activities in the culture and sport field. The House of Culture twenty-fifth anniversary was

celebrated in 2010. Theatrical performances for children and adults, concert performances, art exhibitions, film productions at a knockdown prices or free admission were

included in the Programme of the House of Culture. Over 300 people took part in the different training courses throughout the year – folklore and ballet classes, music school, art school, children theatrical school and amateur theatrical group, etc. The trainees from the House of Culture are winners of numerous awards from their participation in national competitions, festivals and exhibitions. The House of Culture hosted the first projection of the “Nuckids” musical in Bulgaria, in which children from Russian, Bulgarian and Ukrainian towns located near power plants took part. In this unique musical our country was presented by performers from Robinson Vocal Group at the House of Culture.

Kozloduy NPP maintains perfect recreation and sport centre at the town of Kozloduy. The Sports Complex has available fitness room, sauna, physiotherapy cabinets, beach volleyball court, table tennis room, outdoor and indoor swimming pools, etc. Training courses for children and adults and regional and national competitions are run at the Sports Complex. Throughout the year the nuclear power plant granted free of charge access to the children swimming pool for group therapy and gymnastics for children with special needs and adaptation problems.

The athletes from the sport sections of the Parva Atomna Gymnastics, Sport and Tourism Club achieved high results participating in series of national and international competitions throughout 2010. Among the best achievements of the plant sportspeople are the Nations Cup from the International Work Sport Festival and the title Complex Winner from the Bulgarian Nuclear Work Field Day.

Kozloduy NPP House of Culture and Sports Complex are used by plant employees and workers, as well as town citizens and guests.

PUBLIC RELATIONS

Considering the high public interest in the nuclear facilities operation and the significance of the nuclear plant as a reliable producer of environmentally-friendly electricity, the management team of Kozloduy NPP is striving to present to the public all aspects of the plant activities. The traditions established in the company take a significant role – the nuclear power plant is one of the first industrial companies, which considers the role of communication and establishes its own separate public relations organizational department – as early as in 1990. The most recent and actual information, the complete openness in submission of expert opinions and statements regarding current or urgent issues are among the priorities of the plant management.

Anyone paying interest in direct observations and firsthand personal impressions from the Kozloduy NPP operation is allowed to visit or take advantage of the initiative "Open Doors Day", conducted twice a year. In 2010, nearly 900 of over 1 800 visitors preferred this form of visit in order to learn more about the principles of a NPP functioning and the way electricity is generated from nuclear power. For the first time, a visit to Kozloduy NPP was organized for the plant workers and employees and their relatives, in which more than 220 people took part. Control rooms and turbine halls of the nuclear units, Switchyard, Information and Training Centres were among the plant facilities which can be seen during the visits. Except for citizens from all over the country, in 2010, Kozloduy NPP was visited by guests from Romania, the USA, Great Britain, the Republic of South Africa, Vietnam, Norway, Egypt, Cyprus, Greece, Germany, France, China, Serbia, Russia, Ukraine, the Czech Republic, etc.

The public opinion on the operation of KNPP and the prospects nuclear power engineering faces are surveyed on an annual basis by an anonymous enquiry among the adult Bulgarian visitors of Kozloduy NPP. The results show the strong support by the people enquired regarding this way of electricity generation.

The web site of Kozloduy Nuclear Power Plant www.kznpp.org is another form which facilitates to the highest degree all those who are interested in nuclear power and are actively looking for information in this field. Throughout 2010 around 190 000 visits were registered on the web site, by 54% more than the previous year.

The KNPP develops and freely distributes printed materials playing an important role for promoting NPP's activities. The past 2010 was the twentieth in a row, during which the departmental edition Parva Atomna was issued without interruption and reached its readers. The fact, that a number of specialized issues re-print articles from Parva Atomna is telling by itself of the interest it keeps up amongst public and stakeholders.

During the elapsed year the ten year old tradition was continued, the management team of the Company to participate in a working meeting with journalists. Actual information concerning operational results and radiological, environmental protection, financial and other aspects of the KNPP activities was presented to representatives of 20 central and 15 regional mass media. On regular bases press announcements and answers to different media on specific questions are prepared. 55 journalists visited the nuclear power plant to meet members of the management of the Company or other experts.

In the process of arranging contacts of the NPP with the public, special attention is paid to children and youth audience. Nearly 50% from all KNPP visitors in 2010 were young people – pupils and students. The participation of Kozloduy NPP in the initiative Manager for a Day is focused on these target groups. In 2010 for the second time young people with managerial ambitions from secondary schools in Kozloduy took part in the process of real management of the relevant structures of the plant and were acquainted with various aspects of Kozloduy NPP PLC activities.

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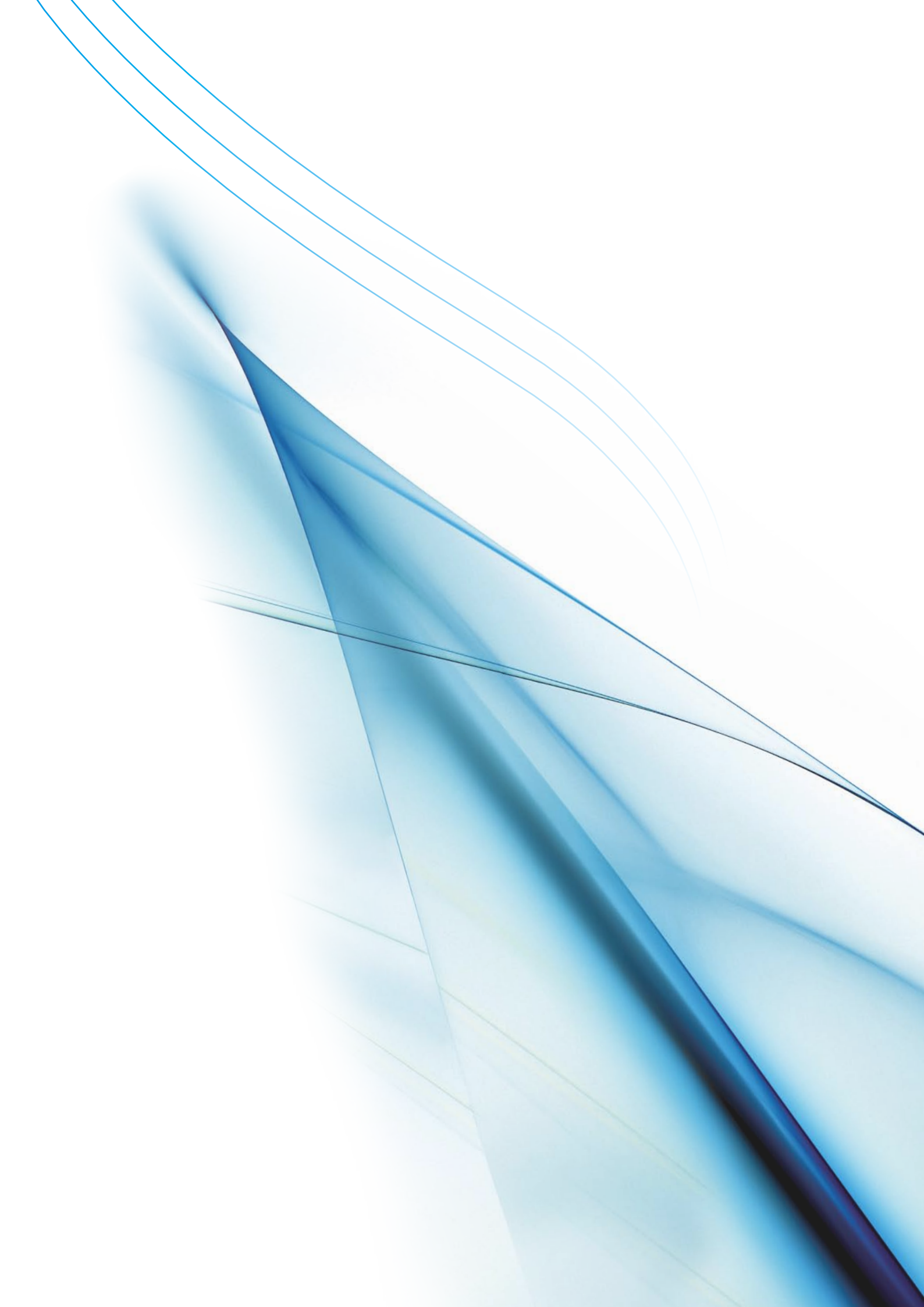
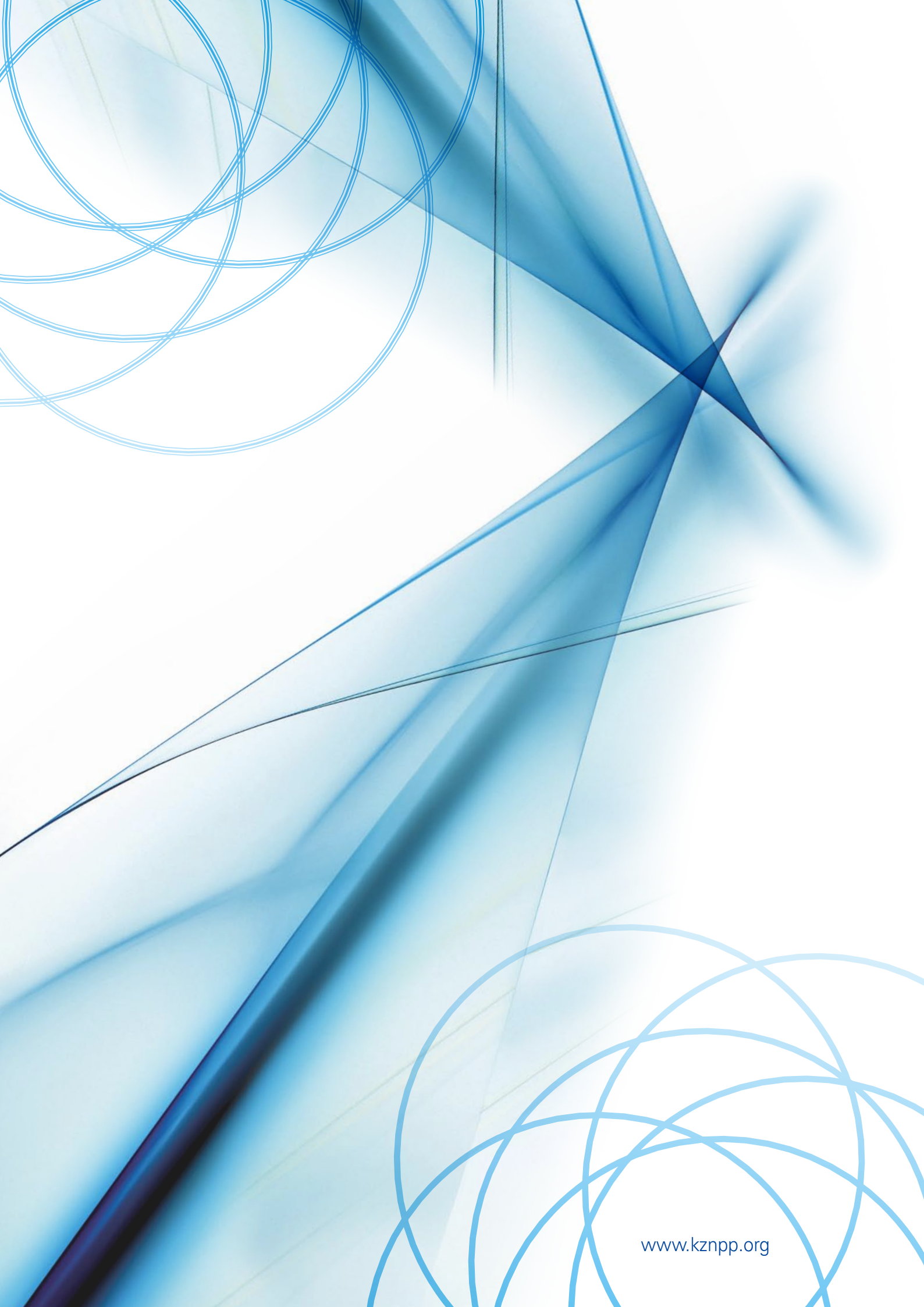
KOZLODUY NPP PLC

phone: + 359 973/ 7 20 20
+ 359 973/ 7 20 00
fax: + 359 973/ 8 05 91
www.kznpp.org





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