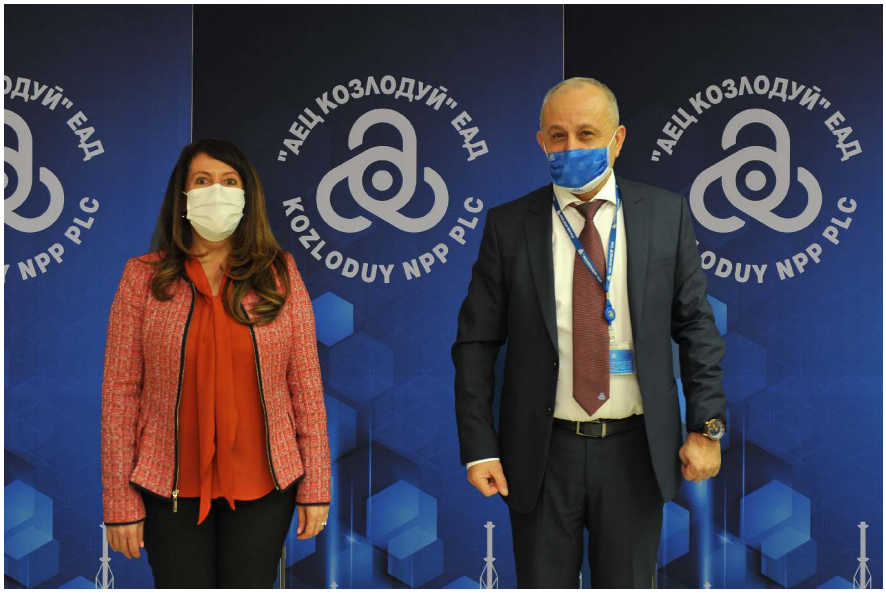
Kozloduy NPP
REVIEW
2020
NOV-DEC

US AMBASSADOR HERO MUSTAFA VISITED THE NUCLEAR POWER PLANT



H.E. Herro Mustafa, Ambassador of the United States of America to Bulgaria, visited Kozloduy NPP on 3 December 2020 to meet the Chief Executive Officer, Nasko Mihov, and representatives of the Company's management team .

In his greeting to the guests, Nasko Mihov emphasized the key role of the plant for the Bulgarian energy sector and the economy, and the achieved high level of safety and reliability. He pointed out that over the years, excellent partnership has been established between Kozloduy NPP and companies from the US nuclear sector.

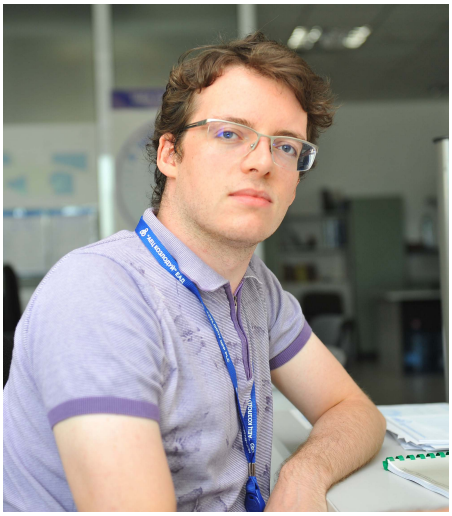
'Today's meeting was a continuation of the Memorandum of Understanding in the field of nuclear energy for civil purposes, signed in October. I was excited to see and hear about the advantages offered by Kozloduy NPP in terms of infrastructure and human capital, which should make it the center of the Bulgarian nuclear energy for future generations,' Ambassador Mustafa said.

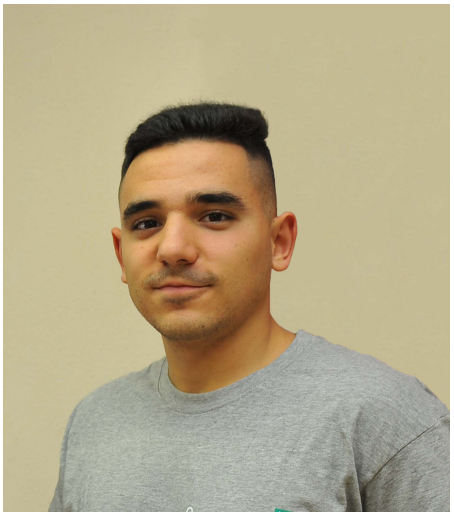
The Safety and Quality Director, Emilian Edrev presented the priority projects implemented by the Company, as well as the status of the diversification programme of nuclear fuel supplies.

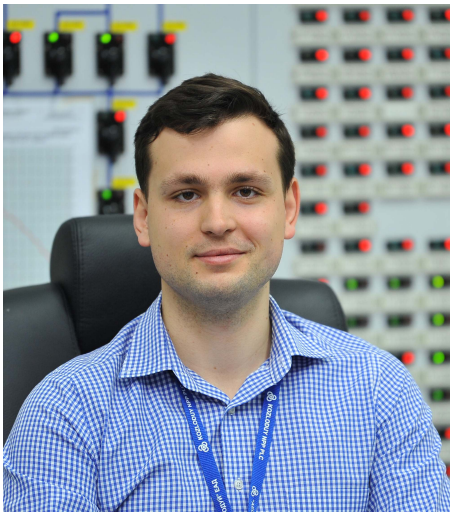
A presentation on the progress of the project for the construction of a new nuclear unit on the Kozloduy NPP site was given by Lyuben Marinov, CEO of Kozloduy NPP - New Builds Plc.

THE FIRST STUDENT 'HACKATOM' GATHERED TEAMS IN A VIRTUAL ENVIRONMENT

Four teams competed in the first international hackathon on nuclear topics, entitled "Hackatom". The student competition was held online on 30 November and 1 December in English and included solving tasks related to nuclear technology. First place went to a mixed team consisting of Kaloyan Karaivanov, 3rd year student at Sofia University (SU), majoring in Nuclear Engineering and Nuclear Energy, Alexander Georgiev, 2nd year student in the same specialty at Sofia University, and the students Adrian Belichenov, Ivan Mandev and Boyan Petrov from AWEKIND International School, Sofia.







Kaloyan and Alexander are scholarship holders at Kozloduy NPP. They are involved in a special programme of the nuclear power plant aimed at supporting young future specialists. It is interesting that the second team in the ranking was led by Alexander Pimpas, who, in addition to being a student in the master's course at the Faculty of Physics at Sofia University, is already a reactor physicist at the Kozloduy NPP.

The teams were given two tasks: to analyze data related to the plant equipment and develop an algorithm predicting the amount of house load energy at parameters set by a jury. The specific tasks were prepared by lecturers from the Obninsk Institute for Nuclear Power Engineering (Russia).

'We performed the tasks together, not divided in parts, which I think was a better approach. When we realised that we were winning, we were very happy, because it was quite unexpected for us,' said Kaloyan Karaivanov in an interview to the company magazine 'Parva Atomna'. The freshman Alexander Georgiev added, 'My participation in the international competition in the first place was a challenge to myself, which I decided to face because of my interest in nuclear power plants. Secondly, it was a great opportunity to learn something new and show what I had already learned. '

Alexander Pimpas added, 'The hackathon is an exciting experience, fruitful, knowledge-intensive, but also challenging. All participants are winners because regardless of their ranking, they get a lot of experience.'

In the course of the competition, participants had the chance to meet online with 92-year-old Russian Professor Georgi Toshinsky, a pioneer of modular reactors under whose scientific supervision the development of a modular fast neutron reactor with a capacity of 100 MW was carried out.

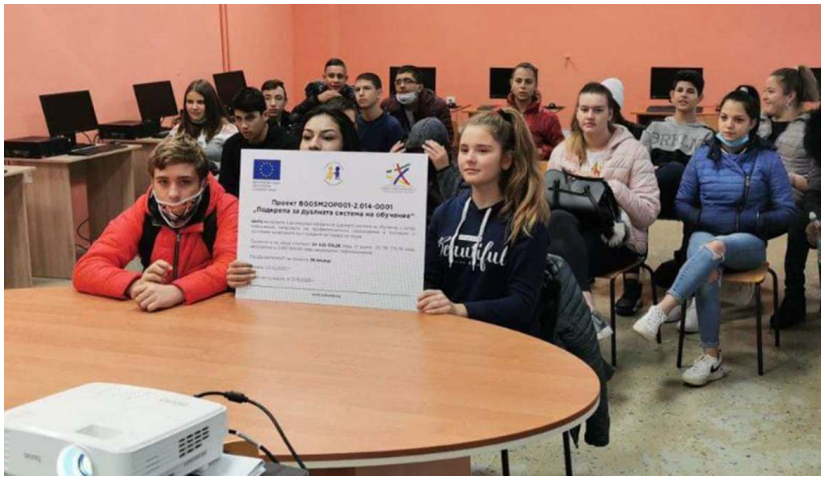
VOCATIONAL EDUCATION – A STARTING POINT TO A SUCCESSFUL CAREER

As a socially responsible company, Kozloduy NPP makes systematic efforts to support the career of the next generations of well-prepared power engineers. The Company strives to outline clear prospects for young people, to encourage them to study technical disciplines and to choose STEM (Science, Technology, Engineering, and Mathematics) related careers.

Some of the plant policies implemented are aimed at promoting and increasing the attractiveness of secondary vocational education and training. The company keeps close cooperation with the Vocational Schools of Nuclear Energy (VSNE) in Belene and Kozloduy. Along with the support for increasing the efficiency of the educational process, the Company also works for increasing the personal motivation of the students. From the beginning of academic year 2020/2021, scholarships are provided to those who have chosen the 'Nuclear Energy' profile at VSNE 'Igor V. Kurchatov' (Kozloduy) and 'Automated Systems' at VSNE 'Marie Sklodowska-Curie' (Belene). There are also various initiatives aimed at presenting a wide range of professions in nuclear energy. The goal is to convince young people that the acquisition of competencies in a specific field and obtaining professional qualification will help them to easily find their place in the labour market.

Meetings of high school students with nuclear power specialists

As part of the European Vocational Skills Week, experts from the Kozloduy NPP held two online meetings on 13 November 2020 with students from VIII grade at the Vocational Schools of Nuclear Energy in Belene and Kozloduy. This is the second year in a row that the nuclear power plant takes part in the large-scale initiative, which in 2020 is organised by the European Commission in partnership with the Federal Ministry of Education and Research of Germany. In the period 9 - 13 November a total of 1025 events were organised with over 3.5 million participants from 38 countries under the motto 'Discover your talent... Your way... Your choice... '.



The students from the 'Nuclear Energy' profile of VSNE 'Igor V. Kurchatov' and 'Automated Systems" profile of VSNE 'Marie Sklodowska-Curie' talked with representatives of the plant Planning and Personnel Selection Department. The lecturers presented the career development opportunities within the Kozloduy NPP, the largest employer in Northwestern Bulgaria, to the young people who are about to master the chosen 'protected' specialty or a specialty with an expected shortage on the labour market. The experts explained in details the steps involved in the career progression in the field of energy. Information on the Kozloduy NPP scholarship programme for students studying priority specialties for the power plant in higher education institutions was provided too. The vocational school students were also given examples of people who worked their way up the ladder from school to an expert position at the nuclear power plant, and were convinced of the great influence of KNPP's social responsibility policy on the whole region.

WHY SHOULD STUDENTS CHOOSE THE NUCLEAR INDUSTRY?

A commentary by Vladimir Lalev, Personnel and Training Centre Director

The Challenges We Face

The topic of the human factor becomes of utmost importance along with the tendencies to extend the operational lifetime of the nuclear facilities. In the context of over 45 years of successful operation of Kozloduy NPP, which will continue in the coming decades, I need to remind you that most of the specialists who were employed at the plant commissioning are about to retire now. The roll amounts to over 700 people for the next 5 years. The key issue of staffing, both in number and training, is crucial for ensuring the safe and reliable operation of the nuclear units.

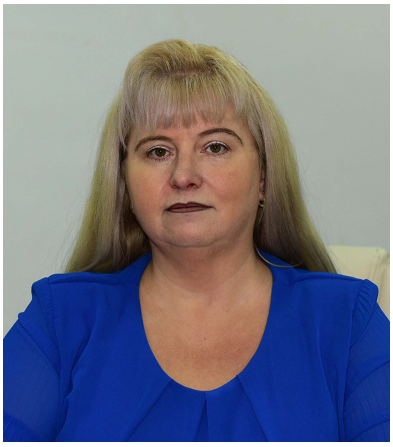
This fact is also reported among the world nuclear community. For several years, the SALTO (Safety Aspects of Long Term Operation) peer reviews conducted by the International Atomic Energy Agency have included the area of Human Resources Management, Competences and Knowledge of Long-Term Operation.

New Horizons

I believe that teenagers in the 21st century need to be aware that nuclear energy is a promising industry. Kozloduy NPP is the largest electricity producer in Bulgaria with virtually zero carbon emissions. By joining us, young people will be involved in shaping more sustainable energy future. The long-term operation of the nuclear power plant will continue to provide a significant share of the country's energy needs and will create numerous career development opportunities.

We Work Together for the Next Generation of Nuclear Specialists

The position of our partners



Why is secondary vocational education important?

Eng. Snezhina Tsvetanova, director of "VSNE Igor V. Kurchatov": This question is most frequently asked by students and parents when it is time to make plans for the future. Secondary vocational education is the 'path' to success and career growth of every young person. The labour market is extremely dynamic and today is oriented towards careers in which there is a lack or shortage of staff. I must note that modern children are smart, intelligent and competitive, and if they are given proper professional orientation, our country will not have a problem with the lack of qualified workforce.

Vocational education provides not only a diploma and a certificate of professional qualification. It also offers the fastest realisation of added value. Young people can enter directly into the workforce immediately after graduating. Our team of experienced lecturers and trainers strives to prepare students by providing knowledge, skills and key competencies in the technical disciplines studied. Therefore, our efforts are focused on 'capturing the signals' of the market and provide the business with motivated and trained young people.

Eng. Maya Garkova, director of VSNE "Marie Sklodowska - Curie" - Belene : Vocational education is career guidance itself. The student educated in a vocational class not only acquires knowledge in a specific field, but also develops an affinity for it. It is the vocational high schools that are the link between the school and business and the formation of specialists. The study of technical skills required to complete the tasks of a particular and specific job makes it possible to fill certain niches in the economy. Vocational high schools are the places where future staff having the required competencies and experience for future career development are born and 'start to walk.'

Is the connection between educational institutions and business useful and how would you define your cooperation with Kozloduy NPP?

Eng. S. Tsvetanova: Undoubtedly, the connection between education and business is very important and useful! The close cooperation between enterprises and educational institutions will ensure the good vocational training of students. Hands-on training, combined with theoretical knowledge, will result in excellent overall professional and personal development.

In this regard, I would like to underline the fact that our vocational school highly values the cooperation with Kozloduy NPP. The nuclear power plant is a good example of a connection between business and education. With the introduction of the dual form of education, our school began the change in the vocational education at a higher professional level. I am sure that the close partnership between Kozloduy NPP and VSNE 'Igor V. Kurchatov' will result in the high quality education and building successful career development.

Eng. M. Garkova: Vocational education and training is not effective without a real work environment, and a profitable economy is unthinkable without well-trained professionals. Business and vocational high schools must work in partnership, business must invest in vocational education so that future professionals can continue to build on what they have learned in school in real work environment. Thus, the companies will have the necessary staff with the required qualifications. For VSNE 'Marie Sklodowska-Curie' – Belene, the cooperation with Kozloduy NPP is both a responsibility and an obligation. The school provides training to secondary specialists for the needs of the energy sector of Bulgaria. Our relations are based on the principle of goodwill, mutual understanding and a positive perspective for the realisation of our students in the structure of the NPP. As times goes, I believe that our partnership will prove to be fruitful for both parties. Our partnership is promising and it depends on us to gain the maximum benefit of it for both institutions.

KOZLODUY NPP WITH AN INITIATIVE FOR A GREENER CHRISTMAS

At the end of 2020, Kozloduy NPP greeted state institutions, businesses and partners by sending more than 300 trees as a gift. This symbolic gesture expresses the Company's commitment to the environment. The small white spruces carried the company's message to their new owners to keep the Christmas spirit alive by planting them at the end of the holidays. Conifers are easily adaptable and will grow successfully both in pots and outside.

Living trees complemented the Christmas decorations at the nuclear power plant. Later, the white spruces will be planted at a place designated to become a part of the green surroundings within the KNPP area.

With their evergreen leaves, the conifers remind of the everlasting power of nature and have become a beloved symbol of Christmas. With this initiative, offering a greener option for creating a Christmas mood among staff and partners, Kozloduy NPP once again shows its responsible attitude to the environment and the conservation of natural resources – one of the top priorities of the Company.