ANNUAL REPORT 2023

KRŠKO NUCLEAR POWER PLANT

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ADDRESS BY THE MANAGEMENT BOARD

Dear reader,

Forty years have passed since the start of the Krško nuclear power plant's commercial operation. Despite all the challenges, this period was an extraordinary success. We fulfilled all the necessary prerequisites, and at the end of the year, the power plant ended its basic operating period and began an additional 20 years of extended operation.

In this regard, at the beginning of the year, after two years of intensive studies, presentations, and discussions, we obtained environmental consent until 2043. We carried out the process in full, including an environmental impact study with cross-border consultations with five countries – all four neighboring countries and Germany. We attracted the best experts from Slovenia and Croatia, and with the help and complete understanding of the state administration, we finished the process in record time.

By moving 592 spent fuel elements from the spent fuel pool to the new spent fuel dry storage facility, we completed the 10-year power plant Safety Upgrade Program. We succeeded in realizing a very ambitious plan – bringing the nuclear power plant, designed and built in the 1970s, to the side of nuclear power plants, designed and constructed today according to the highest safety standards. We achieved this primarily through our employees' knowledge, experience and selfless efforts, good cooperation with companies and institutions, and the constant support of the owners.

The pinnacle of our success was undoubtedly the confirmation of the third periodic safety review by the Slovenian Nuclear Safety Administration. After more than two years, we thoroughly inspected and confirmed the safety of our power plant and achieved the formal prerequisite for uninterrupted operation after 2023.

We planned and implemented these activities in compliance with the time and financial plan and high-quality control. However, we also faced unplanned challenges. The severe floods that affected Slovenia caused extreme infrastructure damage and claimed human lives, stopping almost all facilities from producing electrical energy. The Krško nuclear power plant was able to maintain full power and successfully maintain the power system due to its good preparedness, timely training to face the extreme weather conditions brought about by global warming, and the commitment of its teams. But the challenges in 2023 were not over yet. In early October, the operation team noticed a minor leak of the primary system medium in the containment in the late evening hours.

Knowledge, experience, and high safety culture were essential in making quick decisions, determining the leak‘s location, and taking extensive actions to rectify the fault and continue reliable and safe operation. The emergency outage required to correct the fault was organized and completed in less than 43 days. We achieved this success through good cooperation with the original designer of the power plant, Westinghouse; we have maintained good relations with him for almost 50 years, and most of his knowledge and engagement are demonstrated by the domestic industry and employees of the Krško power plant. It is also necessary to emphasize the exceptional cooperation with state institutions, the full support of the owners during the event, and the positive response of the public. This results from many years of partnership and fair relations, transparent and open business, and selfless work in the broader community in which the power plant operates.

Thus, we symbolically ended the business year and the regular operating period of the power plant. We have successfully tackled significant challenges – united companies under the leadership of a reliable partner, Westinghouse, with the full support of domestic know-how and experience. With the understanding of the Slovenian and Croatian public and the support of the owners of GEN and HEP and the governments of Slovenia and Croatia, who believed in the Krško nuclear power plant and nuclear energy, our power plant operated successfully for all 40 years. We have shown that with excellent and broad international cooperation and transparent and open business, we can overcome all challenges and achieve respectable results at the global level in compliance with our vision „Be an example of nuclear safety and excellence at the global level”.

Gorazd Pfeifer
President of the
Management Board

M.Sc. Saša Medaković
Member of the
Management Board

SUMMARY REPORT AND

In 2023, NEK completed 40 years of operation, obtained all necessary permits for long-term operation, and successfully transferred 592 spent fuel elements to the Spent Fuel Dry Storage (SFDS). Due to an unplanned emergency outage, annual production was lower than planned, and the value of the energy produced by the revised plan was slightly exceeded. At the same time, NEK consistently observed all administrative and environmental restrictions and the high standards of the nuclear industry.

In 2024, the main challenges will be maintaining high operational efficiency, the April outage, the October WANO Peer Review mission, the start of a five-year action plan based on the third Periodic Safety Review, and the preparation and active participation in defending the national report on the assessment of fire safety per the EU Directive on nuclear safety.

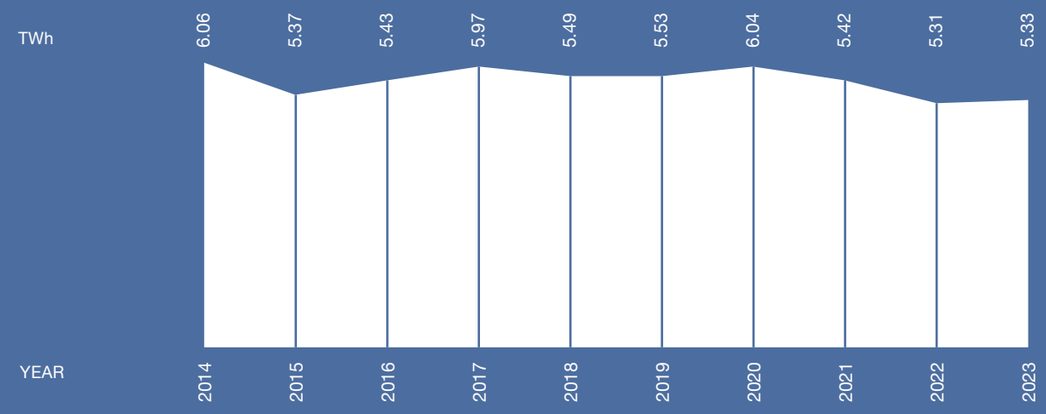
CHALLENGES FOR 2024

According to the original plan, NEK should have produced more than six terawatt hours (TWh) of electrical energy if it operated at full capacity for all 8,760 hours of the year.

It produced 5,332 terawatt hours of electrical energy, 0.03 percent more than the revised production plan of 5,331 terawatt hours.

Diagram of Output by Years

Total: 202.69 TWh
(output since the start of commercial operation)
NEK target for 2023: ≥ 6.02 TWh (original plan)



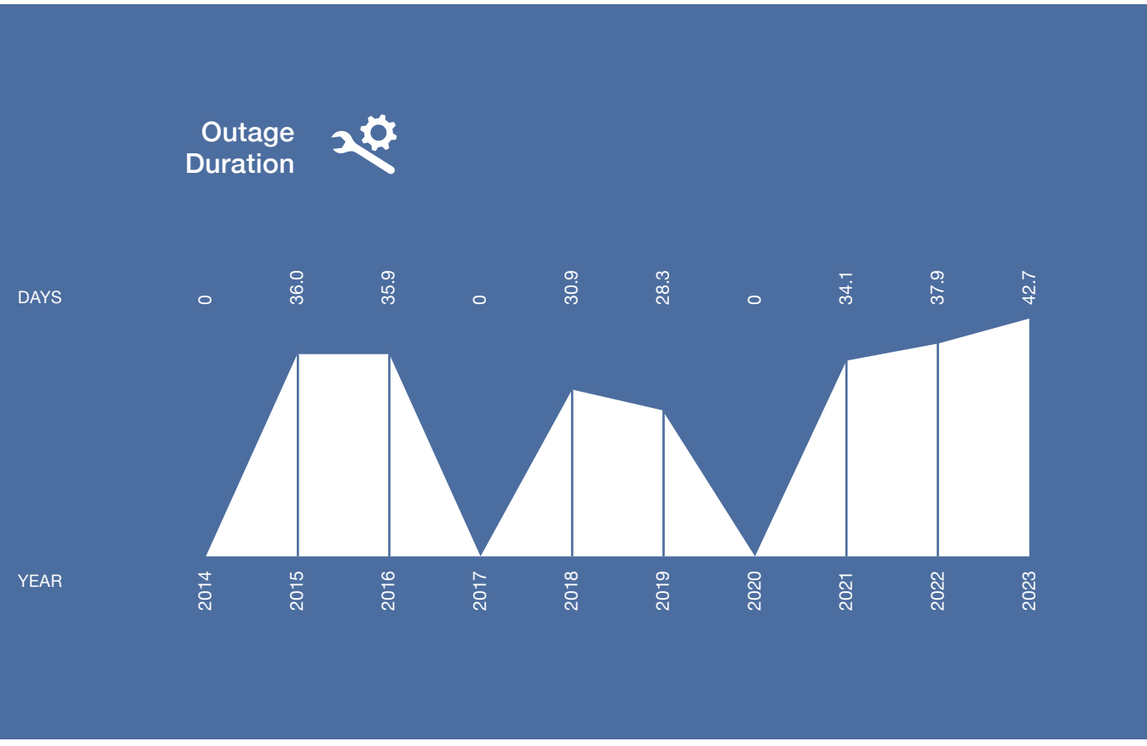
The Slovenian Nuclear Safety Administration (SNSA) issued a decision for SFDS in compliance with the nuclear legislation at the end of October 2022; thus, the obtaining of permits was completed, and therefore, the prerequisite for the first campaign of transferring spent fuel from the spent fuel pool to the SFDS was fulfilled. The transfer of the first 592 spent fuel elements to the SFDS with preparations took place from January to September 2023.

To fulfill the administrative requirements and continue the operation of the power plant after 2023, the activities of the long-term operation projects continued. According to the third Periodic Safety Review program of NEK, the following was completed: review by safety factors, classification of findings according to importance, a plan for changes and improvements, and final descriptive safety assessment of NEK. In 2024, we will start a 5-year action plan. The demanding administrative process of obtaining environmental consent for extending the operating life of NEK from 40 to 60 years was also completed. The Ministry of Natural Resources and Spatial Planning issued the environmental consent in January 2023. Intensive and demanding work took place for more than two years; more than fifty experts from NEK and institutions from Slovenia and Croatia participated.

According to the decision of the Interstate Commission, the handover of low- and intermediate-level radioactive waste (LILRW) to the recipients from Slovenia and Croatia will begin in 2028. NEK will do everything necessary to ensure the storage of LILRW in the existing warehouses until then.

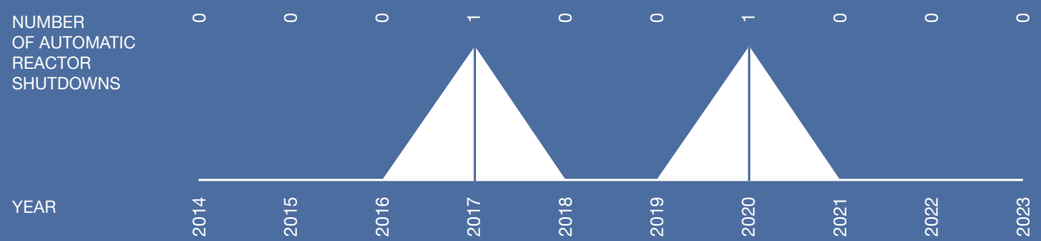
In November, the external certification organization verified and confirmed the compliance of the environmental management system with the ISO 14001:2015 standard and the occupational health and safety system with the ISO 45001:2018 standard during the audit.

Training in emergency preparedness (courses, drills, and exercises) was carried out in full per the NEK annual training plan. The regular yearly exercise took place in December.



The power plant was shut down on 6 October 2023 due to an increased leak in the safety system pipeline, which did not exceed operating limits; an emergency outage began. NEK was reconnected to the power system on 17 November 2023.

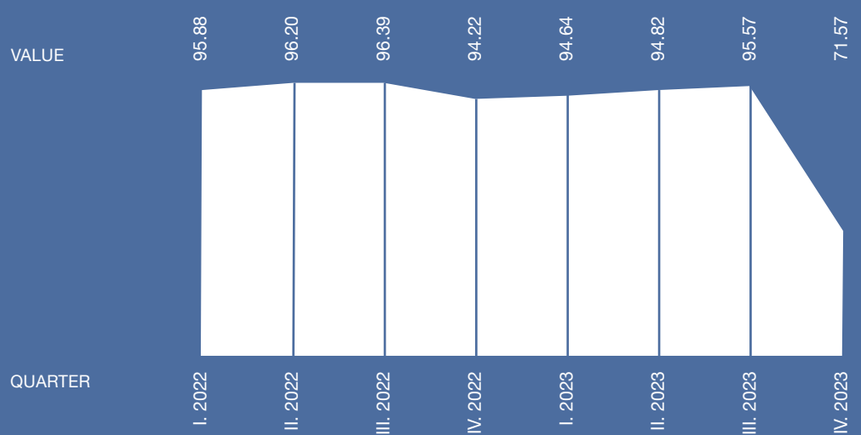
Unplanned Automatic Shutdowns



There were no unplanned automatic reactor shutdowns in 2023.

Performance Indicator Index

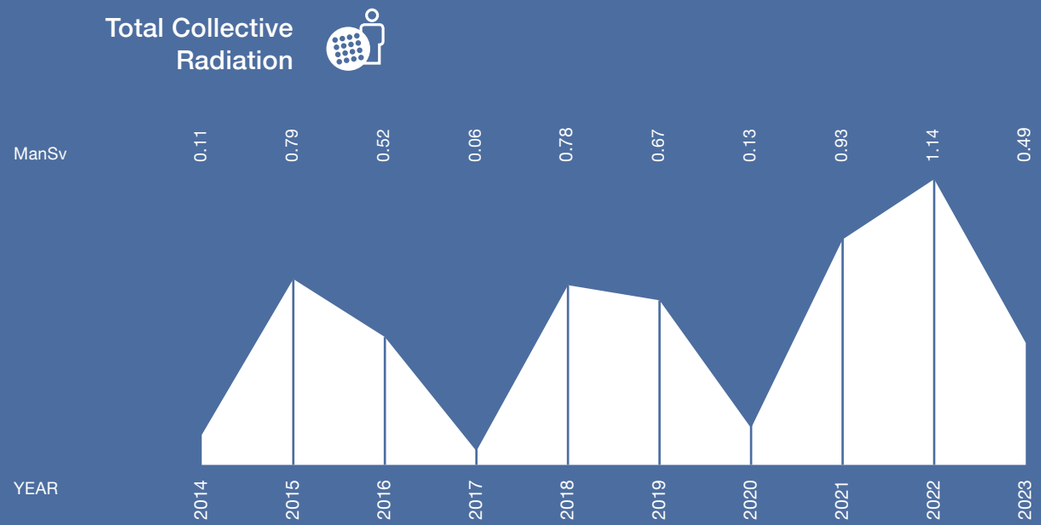
NEK target for 2023: ≥ 98 (original plan)



The World Association of Nuclear Power Plant Operators (WANO) introduced a common Performance Indicator Index to facilitate efficiency monitoring and comparison between power plants. The index is calculated using weighted values of individual indicators and has a scale from 0 to 100.

Due to an emergency outage in 2023, the Performance Indicator Index reached a low value. The 42.7-day plant shutdown had the greatest impact on the Unit Capability and Forced Loss Factors, which have a high weighting share in the Performance Indicator Index. The Performance Indicator Index was also affected by the Total Collective Radiation and, to a lesser extent, the deteriorated chemical parameters of the secondary system.

Total Collective Radiation



The total radiological exposure at the end of 2023 was slightly higher than usual due to the large scope of work in the Radiologically Controlled Area (RCA) during the emergency outage. None of the contractors received a dose higher than the prescribed limits.

Challenges for 2024

In 2023, the NEK staff once again proved it could face challenges as it proactively prepared for them. The emergency outage is an internationally recognized event due to many good practices. The power plant reliably operated at full capacity even during the flooding in August 2023. Thus, for two years in a row – the year before, there were high summer temperatures and low river flows – it confirmed readiness or resistance to the changes brought about by the climate crisis.

The production plan for 2024 envisages 5453 gigawatt hours (GWh) of electrical energy, which, with a one-month regular outage, means that we must ensure stable operation at full power in the remaining days, i.e., all work processes must be adequate every day. A high-quality outage is significant for the realization of operational and business goals. The 2024 outage will be the first in the extended operating life of the power plant, so in addition to standard control, maintenance, and upgrading of equipment, in this and all subsequent outages, it will be essential to check the effect of aging on components, systems, and structures.

Additional requirements or activities derive from the environmental consent for the extension of the operating period and the decision on the completion of the third Periodic Safety Review. The latter defines a plan of changes and improvements for the areas of the facility, safety analyses, operation, and use of operating experience, management, environment, radiation protection, and physical security, which must be completed by December 2028 at the latest and reported to the SNSA every six months.

Extending the operating life of the power plant emphasizes the importance of new processes that ensure long-term safe and reliable operation. An aging program with sub-processes that take care of materials and components such as equipment reliability, material reliability, and single failure vulnerability is the foundation for preparing a program to extend the operating life to 80 years and beyond.

In the fall, the WANO mission will revisit the plant and assess the plant‘s operating condition based on a review of documents, interviews, observations, and evaluation of activities. This will be the sixth mission of its kind, in which more than 20 external reviewers will participate. There will also be an international review or defense of the report on the fire safety of the power plant, which is part of the national report prepared in compliance with the instructions of the European Nuclear Safety Regulators Group (ENSREG).

At the beginning of December, it will be 50 years since the symbolic start of the power plant construction. Even today, we can proudly highlight that construction was completed in the fall of 1981 when the plant was first connected to the power system and trial operation began. After decades of technological and social development, this achievement could strengthen the confidence that we can cope with this challenge even today.

We can see the first impacts of the JEK2 project on NEK; as the project progresses, the impacts will increase. We expect impacts on the systems, components, and structures of NEK, as well as on processes and personnel. Risk assessment and timely action plans are the keys to the continued safe operation of NEK and the simultaneous progress of the JEK2 project.

NEK confirms its importance for the power systems of Slovenia and Croatia, the consumers of electrical energy in both countries, and the public‘s trust based on stable and reliable operation and economical and transparent operations during decades of plant operation. Even in the coming decades, we are determined to consolidate our place on the energy map on these foundations and, in the imminent transformation of the energy sector, to ensure nuclear power the place it deserves.

PRESENTATION OF NEK

The decision to build a nuclear power plant in Slovenia was made due to the need for electrical energy. The power plant operates safely and reliably and plays a vital role in the Slovenian and Croatian power sectors. By the high technical standards of nuclear technology, we fulfill the basic expectations and directions regarding the safety and stability of operation, the competitiveness of production compared to other sources, and acceptance by the public.

The available power at the threshold of the power plant in optimal conditions amounts to 700 megawatts. With an 18-month fuel cycle, we also produce around 6,015,000 megawatt hours of electrical energy in years without outages and around 5,460,000 in years with outages. Over 202,000,000 megawatt hours of electrical energy have been delivered to both power systems since the start of operation.

The status of the company is regulated by the Agreement between the Government of the Republic of Slovenia and the Government of the Republic of Croatia on the Regulating the Status and Other Legal Issues Related to Investment in the Krško NPP, its Exploitation and Decommissioning – Intergovernmental Agreement (Official Gazette of the Republic of Slovenia 23/2003, MP 5, hereinafter IA) and the Articles of Association (consolidated text of NEK, d. o. o., dated 24 September 2019, hereinafter referred to as AA) concluded by the partners GEN energija, d. o. o., (hereinafter GEN) and Hrvatska elektroprivreda, d. d., (hereinafter HEP). With the entry into force of the status documents in 2003, we do not sell electrical energy but supply it exclusively to partners obliged to accept it.

The most important events of the year were obtaining environmental consent to extend the plant‘s operating life from 40 to 60 years, successfully completing the Safety Upgrade Program, the first campaign to transfer spent fuel to SFDS, and the third Periodic Safety Review, as well as successfully completing an emergency outage or repairing a leak in the safety injection pipeline.

We supplied the two companies with 5,332,489 megawatt hours of electrical energy. At the same time, we generated a turnover of EUR 239,991,197 and expenditure in the amount of EUR 239,869,858; the difference of EUR 121,339 is expenditure for tax on profit; thus, the net result after tax is zero, which is in line with IA.

Since the introduction of IA, we have been doing business successfully and in compliance with the expectations of our partners.

About Us

Company Name	Krško Nuclear Power Plant, d. o. o.
Short Name	NEK, d. o. o
Headquarters	Vrbina 12, 8270 Krško
Date of Establishment	29 April 1974
Registration	Krško District Court, entry number 10012000 SRG 200300116
Share Capital	EUR 353,544,826.00
Ownership Structure	50% GEN energija, d. o. o., Krško, Slovenia 50% Hrvatska elektroprivreda, d. d., Zagreb, Croatia
Standard Classification of Activities	D 35.112 – production of electrical energy in thermal power plants, nuclear power plants
Registration Number	5034345
Tax Number	61082597
VAT Identification Number	SI61082597
Bank Accounts	SI56 0292 4001 8793 453 NLB, d. d., Ljubljana SI56 0315 5100 1607 765 SKB banka, d. d., Ljubljana SI56 1010 0005 7820 337 Bank Intesa Sanpaolo, d. d. SI56 0400 1004 8892 548 Nova KBM, d. d., Maribor
Representatives	Gorazd Pfeifer, President of the Management Board M.Sc. Saša Medaković, Member of the Management Board
Web Page	www.nek.si
E-mail	nek@nek.si

Mission, Vision, and Values

We fulfill our mission and responsibility by:

- ensuring safe and stable operation that complies with leading standards that provide individual and collective safety,
- competitive production of electrical energy,
- critical self-assessment of achieved results and the introduction of continuous improvements,
- ensuring socially acceptable operation, which is transparent, ethical, and positively oriented towards the environment,
- observing the principles written in the IA on regulating the status and other legal issues related to investment in NEK, its exploitation, and decommissioning.

Our vision is to be an example of nuclear safety and excellence at the global level. We understand that only exceptional achievements guarantee long-term operation, which motivates us to realize our vision.

The fundamental values are the starting point of our activities, the basis and condition for achieving the vision and mission. They are part of all our work processes and relationships. We live the core values; we are known by them in the professional public and the environment.

Management Bodies

NEK's management and supervisory bodies are the general meeting, the supervisory board, and the management board; they are composed in compliance with IA and AA. Their composition as of the date of drawing up this Annual Report:

The partners' general meeting is represented by two partners, each with a 50% share, namely:

- GEN, represented by the CEO, dr. Dejan Paravan; Danijel Levičar represented him as business director until being appointed to the position of State Secretary for the National Nuclear Program – 20 July 2023; and
- HEP, represented by the board president Frane Barbarić until 8 December 2023, and from 8 December 2023, it is represented by the board president, Vice Oršulić.

Until 7 April 2023, the Supervisory Board performed its supervisory function in the composition of:

- M.Sc. Kazimir Vrankić – chairperson
- Martin Novšak – deputy chairperson
- M.Sc. Robert Krklec – member
- M.Sc. Josip Lebegner – member
- dr. Rajko Pirnat – member
- Primož Stropnik – member

The term of office of the members of the Supervisory Board expired on 7 April 2023, so the general meeting appointed new members for the next mandate period, which lasts until 8 April 2027. The Supervisory Board performs its supervisory function in the composition of:

- M.Sc. Kazimir Vrankić – chairperson
- Stanislav Rožman – deputy chairperson
- M.Sc. Robert Krklec – member
- dr. Dejan Paravan – member
- Andreja Bucik Primožič – member
- M.Sc. Matjaž Prah – member

The company is represented by the Management Board consisting of:

- Gorazd Pfeifer – President of the Management Board and
- M.Sc. Saša Medaković – Member of the Management Board.

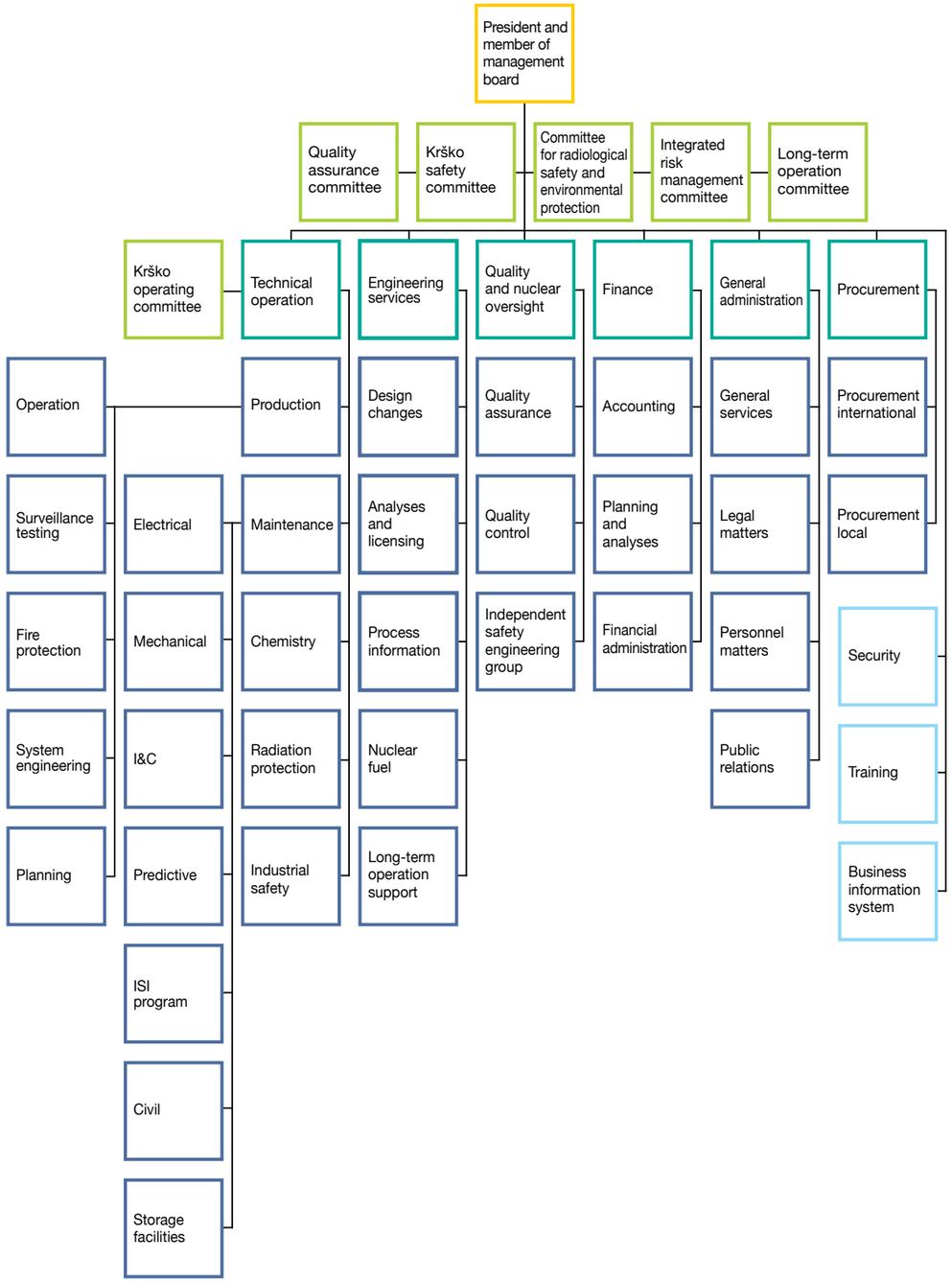
The mandate of the long-time President of the Management Board, Stanislav Rožman, expired on 10 April 2023; from 11 April 2023, Gorazd Pfeifer, who was appointed by the general meeting at its meeting, took over the position. The board member's mandate, M.Sc. Saša Medaković, lasts until 2 November 2024.

Company Organization

The company is designed to cover all functions necessary for quality work processes by nuclear industry standards and regulations. The organization considers the company's specific role, which, in addition to operational functions, also covers engineering and corporate functions, including independent nuclear safety evaluation. The Management System, as one of the key documents, systematically shows the essential organizational characteristics and defines the responsibilities for management, key, and support processes.

Our organization's advantage is stable staffing with competent and responsible employees who are distinguished by a high level of commitment and motivation. Knowledge and expertise are fundamental values, so we constantly ensure employees' development.

Organization Chart



Supervisory Board Report

Supervisory Board Report

Pursuant to Article 282 of the Companies Act, Official Gazette of RS No. 42/06, and the NEK Articles of Association, as amended and consolidated on 24 September 2019, the NEK Supervisory Board prepared the following report on their functions.

Until 7 April 2023, the Supervisory Board was composed of the following members:

- Kažimir Vrankić, MSc – chairman,
- Martin Novšak – deputy chairman,
- Robert Krklec, MSc – member,
- Josip Lebegner, MSc – member,
- Rajko Pirnat, PhD – member, and
- Primož Stropnik – member.

Due to the expiry of the term of office, the General Assembly at the 63rd session appointed the Supervisory Board in the composition of:

- Kažimir Vrankić, MSc – chairman,
- Stanislav Rožman – deputy chairman,
- Robert Krklec, MSc – member,
- Dejan Paravan, PhD – member,
- Andreja Bucik Primožič, MBA – member, and
- Matjaž Prah, MSc – member.

In 2023, the NEK Supervisory Board had eight regular and eight correspondence meetings. It monitored the company's operations and supervised its management. The basis for the board's work was written materials prepared by the company Management Board. NEK Supervisory Board discussed, agreed upon, checked, informed itself of, and/or accepted:

- NEK annual report for 2022 and gave their opinion about the auditor's report;
- Business plan for 2023, rev. 1, and gave their approval to the electric power budget price for 2023;
- Business plan for 2024, rev. 0, and gave their approval to the electric power budget price for 2024;
- NEK long-term investment plan for safety upgrades for the following five-year period (2024–2028), rev. 24;
- Semi-annual reports on the status of modifications II-2022 (July-December) and I-2023 (January-June);
- Approvals to:
  - Signing the contract for the rehabilitation of the concrete containment structure;
  - Concluding a five-year contract (2023-2027) for NEK's participation in professional programs of the American independent institute EPRI,
  - Concluding a contract with Westinghouse for underwater visual inspection of nuclear fuel elements for the period 2024-2028,
  - Concluding a contract with Westinghouse for rehabilitating the safety injection pipeline leakage during the plant emergency shutdown,
  - Concluding an additional four-year contract (2024-2027) for NEK's participation in the MRP program of the American independent institute EPRI;
- Investment Programs:
  - New Technical Security Systems (Central Alarm Centre, Wireless Detection System, etc.), rev. 1
  - Necessary Upgrades of WD and WP systems to establish preconditions for the takeover of LILW from NEK by ARAO (the Republic of Slovenia) and Fond (the Republic of Croatia), rev. 1
  - Replacement of MOV electric motors with Magnesium rotor, rev. 0
  - Replacement of MCC compartments, rev. A
  - Replacement of HP Turbine, rev. 1
  - Replacement of SW system trash rakes, rev. 0
  - Revitalization of the spare Main Generator Rotor, rev. 0
  - Bridge under the NEK industrial track above the backwater drainage channel to ensure NEK flood safety, rev. 0,
  - Upgrade of the Water Treatment System, rev. 1,
  - Replacement of lighting and distribution of low power in the Reactor Building, rev. 0;
- Quarterly Business Reports
- Monthly Reports of the Independent Safety Engineering Group (ISEG), and
- Other matters within the Board's responsibilities.

In line with the accepted methodology, the members of the NEK Supervisory Board received certain data monthly on operations from the NEK's basic financial statements and investment reports, as well as on electrical energy supplies, employees, and average salaries.

As provided for under the Articles of Association, in March 2024, the NEK Supervisory Board reviewed the draft Annual Report for 2023 and found that it reflects a credible position of the company and complete information on 2023 operations, thus complementing information received by the Board during the business year.

The NEK Supervisory Board established that the auditing company *BDO Revizija, d.o.o.,* in their report assessed that the financial statements for 2023 were in all important segments prepared in compliance with the Intergovernmental Agreement, Official Gazette of RS No. 23/2003, the Articles of Association and Slovenian Accounting Standards in those areas not regulated by the Intergovernmental Agreement and the Articles of Association.

Pursuant to Article 546 a of the Companies Act, the NEK Supervisory Board also reviewed the Report on the relationships with related companies for 2023 together with the Report of the independent auditor on the limited assurance. The NEK Supervisory Board established that the auditor concluded that:

- information contained in the report is correct in all significant aspects;
- the value of NEK at the time of concluding legal acts with related companies was not in significant aspects unproportional; and
- there were no circumstances that would demonstrate an essentially different assessment from the one given by the management.

The NEK Supervisory Board has no comments on the Independent Auditor's Report concerning the limited assurances.

Krško, 20 March 2024

NEK Supervisory Board Chairman

Kažimir Vrankić, MSc

Statement on Company's Management

Statement about Business Operations

Under Article 70 Paragraph 5 of the Companies Act, the Management of the company hereby declares that in 2023 it respected all the principles concerning the operation of the company striving to ensure their implementation.

The Management Board declares that:

- it operates the company per the Intergovernmental Agreement (Official Gazette of RS, No. 23/2003) and the Articles of Association (last consolidated amended version of 24 September 2019) as well as the current legislation and nuclear industry standards;
- it complies with the Code of Safety and Business Ethics published at www.nek.si, the Five-Year Development Plan, and the Management System.

The company's status is regulated by the Intergovernmental Agreement and the Articles of Association, which were concluded by GEN energija, d. o. o. (GEN) and Hrvatska elektroprivreda, d. d. (HEP). According to the Intergovernmental Agreement, GEN and HEP are the company's owners, each with a 50% share of the company's capital.

To ensure effective operations of all business processes, management systems have been implemented with effective systems of internal control.

The purpose of internal controls is to ensure the accuracy, reliability, transparency, and clarity of all processes coupled with effective risk management related to financial reporting. The key factors of effective internal control are a clear organizational structure with a detailed listing of tasks and responsibilities and internal procedures per each working process. The internal control system is implemented in business processes at all organizational levels. Internal controls are systemized and laid down in writing in internal instructions which include the entire production process and the key support functions to the operation of the plant. The effective system of internal controls in the work process establishes mechanisms that ensure safe and stable plant operation and cost-effectiveness.

The accounting systems incorporate controls that ensure that:

- the umbrella regulations related to the Krško NPP's formation and operation, i.e., the Intergovernmental Agreement and the Articles of Association, are fully respected and
- business events are properly recorded as defined by umbrella regulations and Slovenian Accounting Standards.

Appropriate and effective internal control systems and reliable risk management ensure the plant operation is in line with its mission and long-term strategic goals.

The General Meeting and its key responsibilities are governed by the Intergovernmental Agreement and the Articles of Association. As a company body, it is set up on a parity basis. All the responsibilities of the General Meeting are undertaken by the owners. There were three General Meetings in 2023, at which:

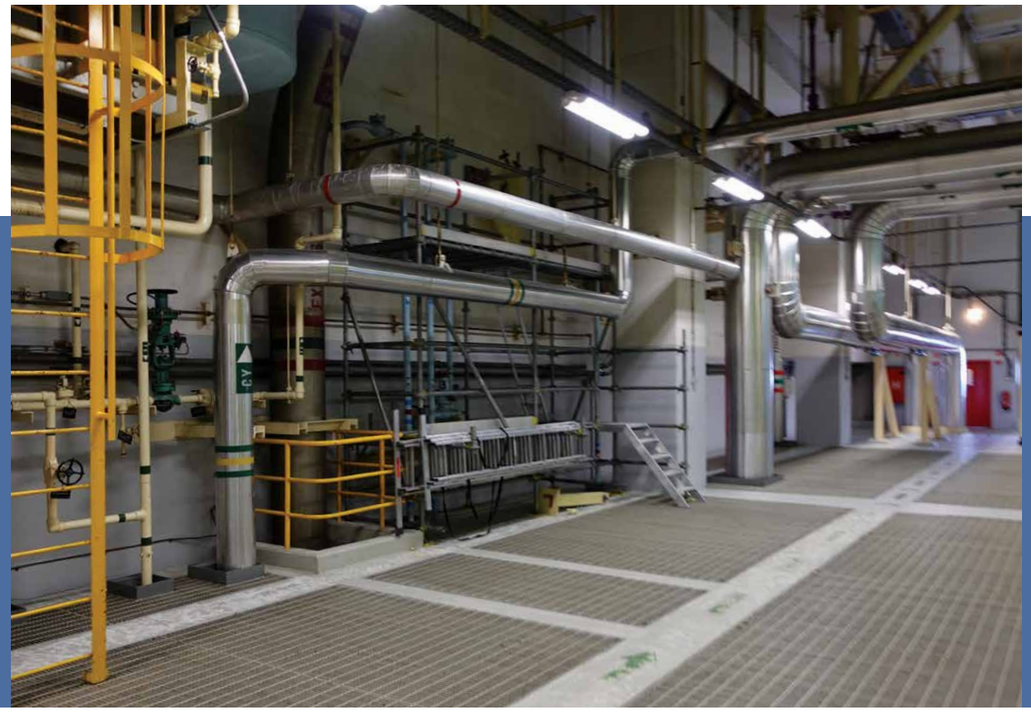
- the Annual Report 2022 was accepted,
- the discharge for 2022 was given to the Management Board and Supervisory Board, and
- due to the termination of the mandate of the current members, the Supervisory Board was appointed in a new composition with a term of office until 8 April 2027.

The supervisory and management bodies are the Supervisory Board and the Management Board, both composed on a parity basis. Their composition, responsibilities, and functions are defined in the Intergovernmental Agreement and the Articles of Association. The functions of the Supervisory Board are detailed in the Supervisory Board report for 2023.

Krško, 15 March 2024

Gorazd Pfeifer, President of the Management Board

Saša Medaković, Member of the Management Board



Statement about Business Operations

The plant management board defines the business policy, considering the Intergovernmental Agreement (IA) and Articles of Association (AA). Management manages the company‘s operations and determines the business policy to ensure safe and reliable operation, production competitiveness, and social acceptability.

Legislation, IA, standards of the nuclear industry, and effective management of commercial companies are the external framework of NEK‘s operation and business. Strategic documents, such as the Code of Safety and Business Ethics, the Five-Year Development Plan, and the Management System, guide us in accomplishing our mission and vision.

The Code of Safety and Business Ethics outlines the basic principles of our ethical and moral conduct. It defines fundamental and personal values, vision, mission, and principles of behavior and action in our mutual relations. The Code guides our actions and tells us who we are, what we believe in, and what we expect from our coworkers.

Since its establishment, NEK has regularly encountered diversity in its operations, as the company‘s founders were energy sector organizations from Slovenia and Croatia. Significant diversities have been the integration of American technology into the European infrastructural, legislative, and cultural space, as well as cooperation with suppliers from different cultures of Europe, America, and Asia.

The general meeting, the supervisory board and the management board of the company are aware of the diversity, which is why they subordinated their management to four goals: nuclear safety, competitiveness, social acceptability, and self-critical assessment. NEK complies with IA, which regulates its operation with the principle of parity in the composition of the general meeting, management board, and supervisory board, as well as regulations from the field of labor law on the prohibition of discrimination and ill-treatment. It also observes the Code of Safety and Business Ethics and the human resources management policies.

Research and Development of the Company

NEK invests significant funds and human resources in research and development:

- research that NEK itself finances due to specific needs, such as the development of new safety solutions and analyses in cooperation with Slovenian and Croatian faculties and institutes;
- research carried out with research institutes from Slovenia and Croatia; these are more fundamental, generic projects from which NEK benefits indirectly.

Risk Exposure

With the comprehensive risk management program, we provide systematic methods, processes, and activities for timely identifying exposure to various types of risks that affect our business and for addressing, reducing, and managing the identified risks.

Risk identification takes place at all levels in the power plant. Significant risks, the consequences of which could affect nuclear safety, electrical energy production, or personal safety, are dealt with by the Integrated Risk Management Committee, an advisory body of the NEK management board. Other risks are dealt with per internal programs and procedures at the Krško Operating Committee or the board committee for non-technical issues.

Nuclear safety risks are addressed first and examined most thoroughly because the nuclear safety of the facility is our highest priority. We also manage them by constantly investing in safety and other systems, considering administrative decisions in nuclear safety, good practice of the best power plants in the world, and recommendations of the WANO and IAEA missions. We maintain a high level of safety culture and awareness among all employees. Our property is insured against nuclear, fire, other risks, and machine breakdown. We also maintain insurance contracts for third-party damages.

The main risk areas (besides the risk of nuclear safety) are:

Operational risks can affect the reliability and availability of the power plant, unwanted transients and shutdowns, and outage duration as one of the availability parameters of the power plant. Operational risk is associated with unplanned shutdowns and subsequent loss of revenue. This is ensured with IA and AA. The value of one day‘s electrical energy supply at cost price is approximately EUR 650,000; at market price, it is slightly more than EUR 1,500,000 (the average price of HUPX is considered).

Radiological risks could impact the radiological safety of an individual or a group of people due to unplanned exposure to radiation, external or internal contamination, or the spread of radioactive hot particles.

Personal risks include the exposure of workers to classic work injuries or radiation sources.

Environmental risks mean the likelihood that emissions from the power plant could affect nature or human health.

Facility management risks include the inability to make critical decisions regarding investment, maintenance, and operation of the facility and their financing, including financial risks.

Market risk mainly refers to the risk of price drop in the electrical energy market.

Financial risks refer to price risk associated with the price growth risk of raw materials and materials, liquidity risk, risk of capital inadequacy, foreign currency risk, interest rate risk, and credit risk.

Risks in procuring goods, services, and construction refer to delays or the inability to realize contract awards due to public procurement and related processes with the National Review Commission.

Other risks include the risk of non-performance of suppliers‘ obligations, inadequate qualification procedures and commercial grade item dedication for safety application procedures, obsolescence, and unavailability of components, as well as forged products or declarations for the built-in components and materials.

Goals

We set our goals in the Business Plan for the year 2023. Due to the emergency outage, we revised it. We list originally planned and revised indicators and pointers, performance in achieving the revised goals for 2023, and planned goals for 2024.

PLANT PERFORMANCE	Original plan 2023	Revised Plan 2023	Realization 2023	Plan 2024
Performance Indicator Index	≥ 98	≥ 68	**71.57**	≥ 96
Unit Capability Factor (UCF)	≥ 98%	≥ 86%	**87.83%**	≥ 91%
Produced Electrical Energy (in GWh)	≥ 6,015	≥ 5,331	**5,332.5**	≥ 5,453
Outage Duration	/	≤ 43 days	**42.7 days**	≤ 30 days
OPERATING EVENTS				
Unplanned Automatic Reactor Trips	≤ 1 every three years	≤ 1 every three years	**0 for three years**	≤ 1 every three years
Operating Events, Levels 1 and 2	≤ 3	≤ 3	**1**	≤ 3
UNPLANNED AND PLANNED SHUTDOWNS				
Number of Unplanned Shutdowns	≤ 1 every two years	≤ 1 every two years	**1 every two years**	≤ 1 every two years
Forced Capability Loss	≤ 0.6%	≤ 10.00%	**8.49%**	≤ 0.65%
OPERATING RISK ASSESSMENT				
Reactor Core Safety:				
CDP/12 weeks – online	≤ 7 E-7	≤ 7 E-7	**4.73 E-7**	≤ 7 E-7
CDP/outage – during outage	/	/	**/**	≤ 3 E-5
Reactor Fuel Reliability (Ci/m³)	≤ 5.5 E-5	≤ 5.5 E-5	**3 E-6**	≤ 5.2 E-5
ENSURING SAFETY AND HEALTH				
Collective Radiation Exposure (man-Sv)	≤ 0.5	≤ 0.56	**0.49**	≤ 0.9
Individual Dose Exposure (mSV)	≤ 10	≤ 10	**8.03**	≤ 10
Industrial Safety Accident Rate	≤ 0.27	≤ 0.4	**0.36**	≤ 0.37
ECONOMIC AND PROJECT GOALS				
Estimated price/realized power cost price (in EUR/MWh)	≤ 38.97	≤ 45.31	**44.60**	≤ 43.05
Total operating costs (without depreciation in EUR million)	≤ 166	≤ 173.1	**169.2**	≤ 177
Planned costs of emergency outage (in million EUR)	/	13.8	**12.2**	/
Investing in technological upgrading (in million EUR)	62.5	62.5	**37.6**	52

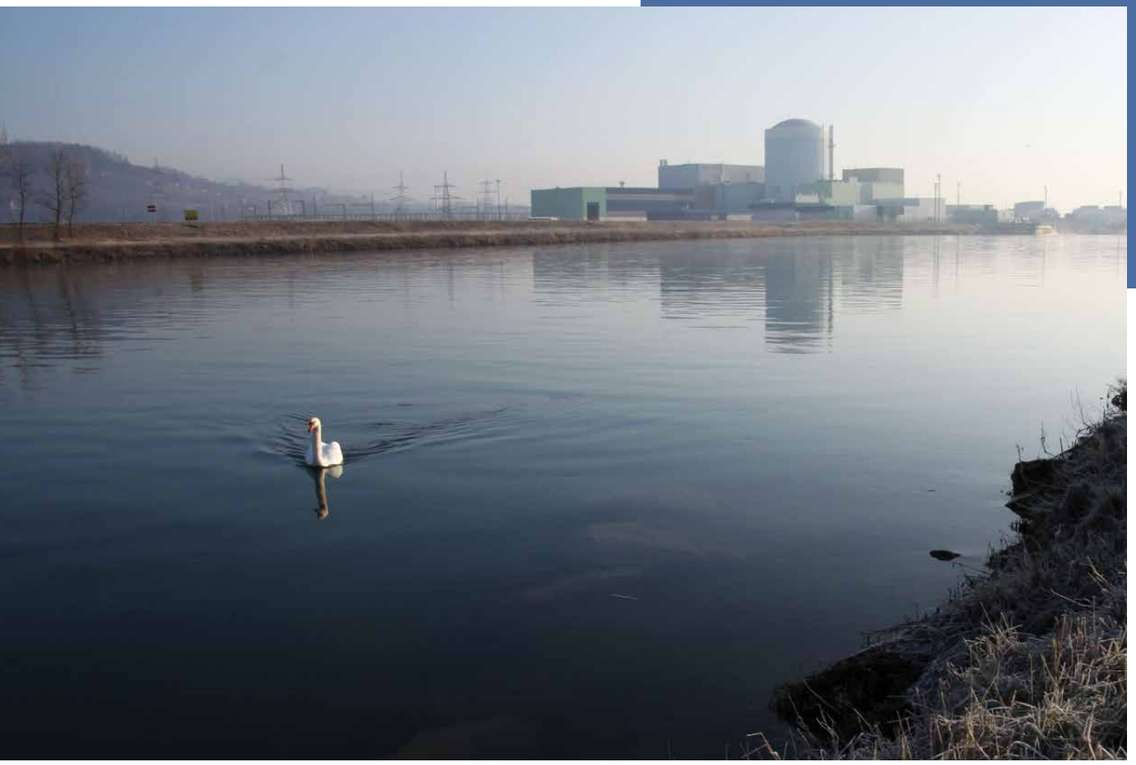
MORE IMPORTANT PROJECTS	Original plan 2023	Revised Plan 2023	Realization 2023	Plan 2024
SUP – Phase 3				
Spent Fuel Dry Storage	100%	100%	100%	
THE PLANT LIFE EXTENSION PROJECTS				
Periodic Safety Review (PSR3)	100%	100%	100%	
Environmental Impact Assessment and obtaining environmental consent	100%	100%	100%	
OTHER PROJECTS				
Replacing component cooling system heat exchangers	70%	70%	70%	100%
New technical security systems (Central alarm center, Wireless detection system, etc.)		60%	50%	90%
Upgrade of PARMS radiation monitors		40%	40%	
Upgrade and adaptation of RW processing systems – preparation for the handover of LILRW per IA		90%	90%	100%
Upgrade of evaporators in boron recycling and liquid waste processing system		20%	5%	30%
Work efficiency center and reduction of energy self-consumption	40%	40%	10%	70%
Renovation of the 400/110-kV switchyard equipment and installation of the transformer monitoring system – TMS on T1/T2				100%
Replacement of SW System trash rakes				50%
Revitalization of the radioactive gas handling system				70%
Water treatment system upgrade – WT				30%
Lightning protection upgrade				100%
Ensuring safe access and safe work at height				60%
The bridge under the NEK industrial track above the backwater drainage channel to ensure the NEK's flood safety				70%
ATTITUDE TO THE ENVIRONMENT AND THE PUBLIC				
All releases into the environment	Subject to regulatory restrictions	Subject to regulatory restrictions	Subject to regulatory restrictions	Subject to regulatory restrictions

As evidenced by the data, the year 2023 was successful despite the emergency events, and we also achieved all the goals set by the revised plan.

BUSINESS REPORT

1.0 RESPONSIBLE ATTITUDE TOWARDS THE ENVIRONMENT

Concern for environmental protection is included in all work processes at NEK. The results of the measurements confirm that all environmental impacts were far below the administrative limits. Authorized organizations prepare a special annual report on radiation monitoring near NEK. A recertification assessment of compliance with the requirements of the environmental standard ISO 14001:2015 once again confirmed the adequacy of environmental management.



The purpose of radiological monitoring is to monitor the operation of the power plant and assess the impact on the environment or the population. In this way, compliance with prescribed restrictions is also established.

NEK measures radioactivity in controlled wastewater discharges into the Sava River and discharges from the ventilation system into the air. Independently, external authorized organizations measure samples from the environment, mainly within 12 kilometers around the plant. In addition, 13 automatic radiation measurement stations are installed near the power plant, which can detect changes in the natural level of radiation due to precipitation and possible changes due to the nuclear facility. Independent authorized organizations also monitor the Sava River downstream, up to 30 kilometers from the power plant.

The impact of NEK on the surrounding area is so low that it is not measurable. However, it is possible to calculate it with the help of models for the most exposed population group and compare the calculated dose with the dose due to natural and other sources of radiation. An estimate of the burden of an individual from the reference group (an adult who eats only locally produced food and fish and would receive the highest dose) shows that the annual dose for such an individual is about 0.5 microsievert. NEK is subject to an individual dose limit of 50 microsieverts in one year due to releases into the environment for the sum of the contributions of all possible transmission paths (at a distance of 500 meters from the reactor or more). Natural radiation and lower effects of general radioactive environment pollution cause a dose of 2300 microsieverts in one year. In 2023, the radiation impacts of NEK on the population in the surrounding area were estimated at 0.12 microsieverts, which is 0.24 percent of the said limit (50 μSv).

The results of measurements in the environment and model assessments are discussed in a special report, which will be prepared for 2023 by the Institute „Jožef Stefan“ in cooperation with the Institute for Occupational Safety, MEIS, and the „ Ruđer Bošković“ Institute.

1.1
Liquid Releases of Radioactive Substances

Wastewater may contain fission and activation products. Fission and activation product activity (excluding H-3 tritium, C-14 carbon, and alpha emitters) was 0.021 percent of the additional annual activity limit for liquid discharges. The activity of tritium released was 26 percent of the prescribed annual limit. Tritium is an isotope of hydrogen found in water; due to its low radiotoxicity, despite its higher activity, it is less important compared to other contaminants.

The plant observed administrative and technical regulations, which require the concentration of radioactivity in the wastewater discharge channels not to exceed the prescribed values.

1.2
Releases of Radioactive Substances into the Air

Compliance with the total annual dose limit of 50 microsieverts for releases to air and water is checked monthly. For air at a distance of 500 meters from the reactor, the dose that could be received by a person at this distance in a year due to external and internal radiation is calculated. In the calculation, the most unfavorable monthly average rarefaction of the atmosphere and discharge at the ground are assumed for each wind direction. The result for 2023 is 0.67 microsievert (1.34 percent of the annual limit). Detailed information is presented in the table below.

Technical regulations were also considered so that the concentration of radioactivity in the air or the dose rate within 500 meters of the reactor did not exceed the prescribed value.

Data on radioactivity in liquid discharges for 2023

radioactive substances	annual limit	emission activity	percentage of the limit
fission and activation products	100 GBq	0.021 GBq	0.021
Tritium (H-3)	45 TBq	11.7 TBq	26

Data on radioactivity in air releases for 2023

radioactive substances	total annual limit	dose	percentage of the limit
fission and activation gases (total)		1.35E-02 μSv	
Iodine (I-131 and others)		4.10E-04 μSv	
dust particles (Cobalt, Cesium, etc.)		2.86E-04 μSv	
Tritium (H-3)		6.36E-01 μSv	
Carbon (C-14)		1.66E-02 μSv	
	50 μSv	total 0.67 μSv	1.34

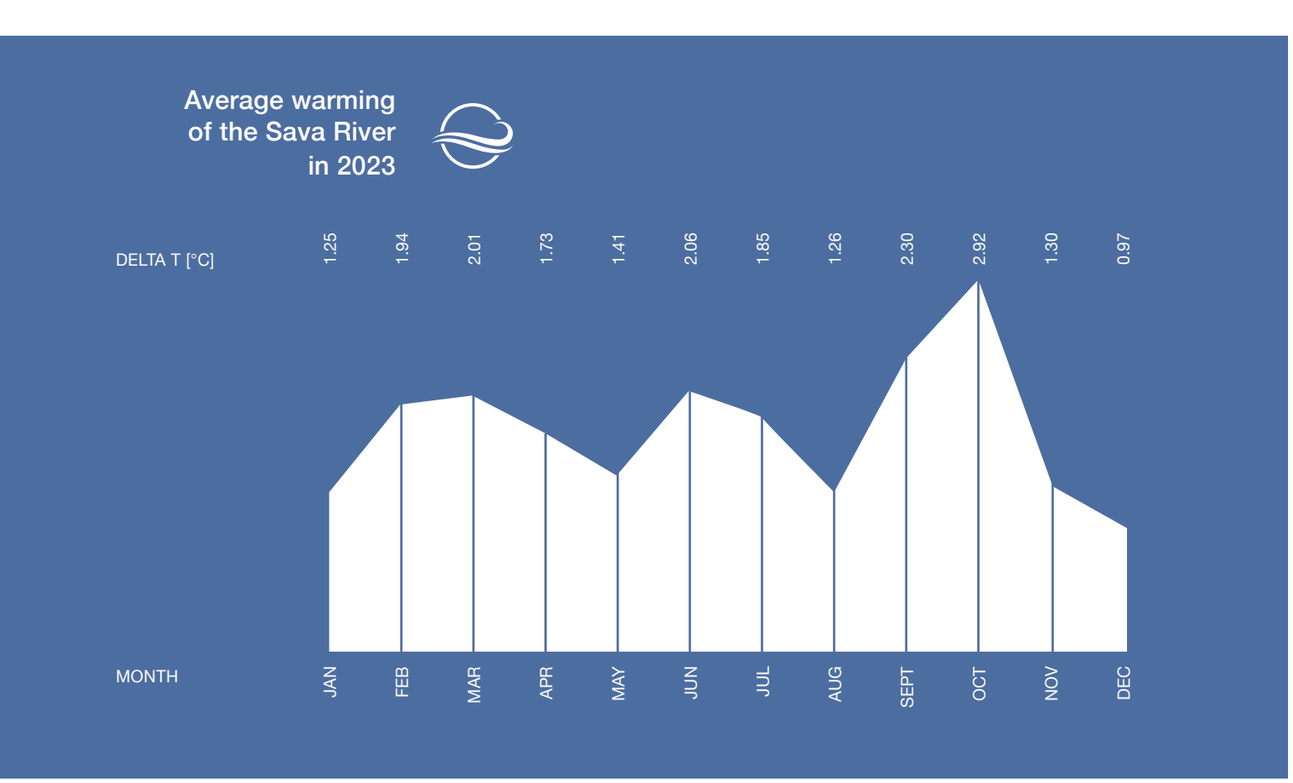
1.3 Measurements of Radioactive Releases and Samples from the Environment

NEK's radiation protection laboratory uses an accredited method to constantly measure air samples and samples from the environment, thus meeting the requirements of the ISO/IEC 17025:2017 standard since 2007, verified by Slovenian accreditation. The NEK radiochemistry laboratory also carries out accredited radioactivity measurements of periodically inspected samples of liquid discharges.

1.4 Measurements of the Sava River and Groundwater Parameters

By the environmental protection permit regarding emissions into water and the water permit, we measured the temperature and flows of the Sava water. We monitored the groundwater levels and the biological and chemical consumption of oxygen monthly.

We had no problems with the maximum permitted warming of the Sava (average daily increase of 3°C) because the hydrological situation during the year was favorable. The cooling towers were used a few times during the increased flows of the Sava River.



Note: Only the days when the plant was in operation are considered when calculating the Sava's average heating.

With authorized organizations, NEK regularly monitors groundwater by continuously measuring the level and temperature at three boreholes and two locations on the Sava River and performs fortnightly measurements at ten boreholes in the Krško-Brežice field. The groundwater level in the observed boreholes near the watercourse has risen by about two meters compared to previous years due to the established accumulation of the Brežice hydropower plant. It is similar to the levels in 2022.

1.5 Data on Radioactive Waste and Spent Fuel

In 2023, 238 new packages of low and intermediate-level radioactive waste (LILRW) were stored at NEK with a total volume of 62.1 cubic meters (m^3). The NEK target for the maximum stored volume of LILRW remained unchanged and was exceeded in practice. Due to the construction of a waste manipulation building, it was not yet possible to categorize all the waste generated in 2017, 2018, and partly in 2019. After the establishment of this building, the volume of stored waste increased, which was categorized in addition to regularly generated waste. In 2023, we reduced the volume of LILRW by taking 216 packages for incineration and supercompacting to external contractors. The total volume of inventory stored at NEK on 31 December 2023 was 4,599 LILRW packages, with a total volume of 2,518.3 cubic meters and a total activity of 19.5 terabecquerel (TBq).

The spent fuel pool or wet storage contains 840 used fuel elements from 32 fuel cycles, while the Spent Fuel Dry Storage contains 592 spent fuel elements. The total mass of spent and used fuel material is 556.1 tons.

1.6 Environmental Management and Municipal Waste

Since the end of 2008, NEK has had an environmental management system per the ISO 14001 standard. After the certificate of compliance with the standard has been issued, the system is checked annually by an external certification organization. A recertification audit was carried out according to the ISO 14001:2015 standard, which is carried out every third year. It was established that NEK adequately complies with the requirements of the environmental management system.

Municipal wastewater is treated with a special treatment plant. At its outlet, an external authorized contractor periodically independently measures pH, temperature, undissolved substances, chemical and biological oxygen consumption, and treatment efficiency per the requirements of the environmental protection permit. Monitoring results show the proper operation of the treatment plant, as all the values complied with regulations.

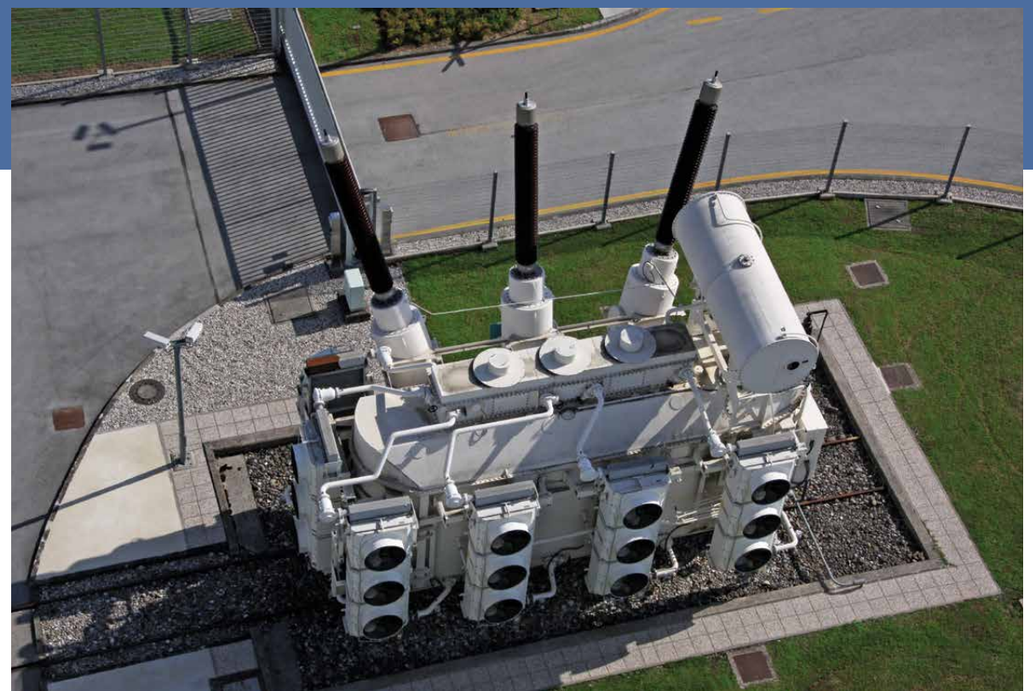
2.0 HIGH LEVEL OF NUCLEAR SAFETY

Nuclear safety is always a priority for us. We achieve a high level of nuclear safety through independent verifications and critical self-assessment of the results, constant improvements in human behavior and safety culture, modernization of equipment and processes, learning from our own operating experience and international practice, and comparison with the best facilities in the world.

Due to its specific nature, NEK already defined an appropriate attitude towards the environment in the basic project (extensive research before placement, strict adherence to standards during construction). During start-up and continued operation, independent control of environmental impacts was established (releases of radioactive substances into water and air, measurements of radioactivity in the environment, handling of nuclear fuel, and radioactive and hazardous waste). The attitude towards the environment is part of the business policy, in which we prioritize safe and stable operation. Environmental management practices at NEK follow the ISO 14001:2015 standard, which is the most internationally recognized environmental management standard.

The NEK Protection and Rescue Plan (NZIR NEK) has also been drawn up, defining organization, measures, and means for managing emergency events with possible radiological impacts on the environment.

One of the essential elements of maintaining and improving safety in the nuclear industry is the consideration of operating experience. Based on experience in the industry, we implemented the NEK Safety Upgrade Program (SUP) at the request of the regulatory body.



Our development tasks and work priorities are an integral part of the Internal Commitments and Goals document. They are determined based on the expectations of the Management Board, core values and defined policies, and our focus areas. In 2023, we devoted our attention to the appropriate transfer of knowledge, experience, and skills for safe and stable long-term operation, the proper level of protection and control in radiation protection, and the consistent observance of safety and health principles at work.

In 2022, a Spent Fuel Dry Storage (SFDS) was built. In January 2023, the operating permit was issued after a successful technical inspection of the building. With this, the trial transfer of casks could begin. After the dry run transferring of the cask from the fuel handling building to the SFDS, we moved the first 592 fuel elements to the dry storage. Transferred fuel elements represent about a quarter of the current total spent fuel pool inventory.

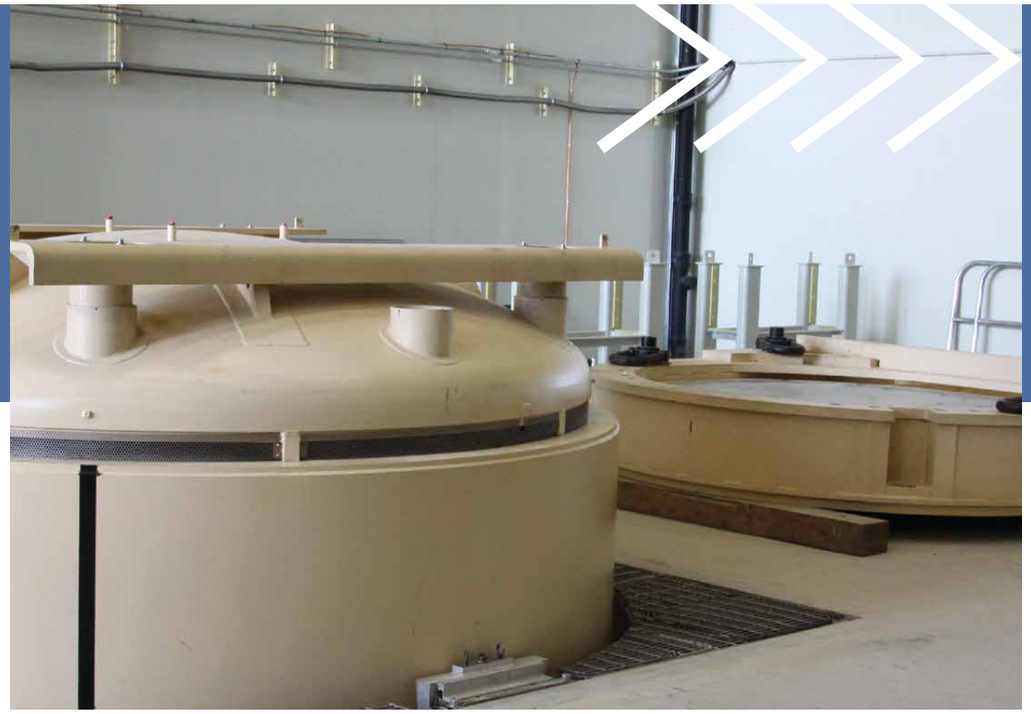
In 2023, the activities of the third Periodic Safety Review, confirmed by a decision of the SNSA, ended. It is one of the key reviews with which we ensure the long-term operation of NEK.

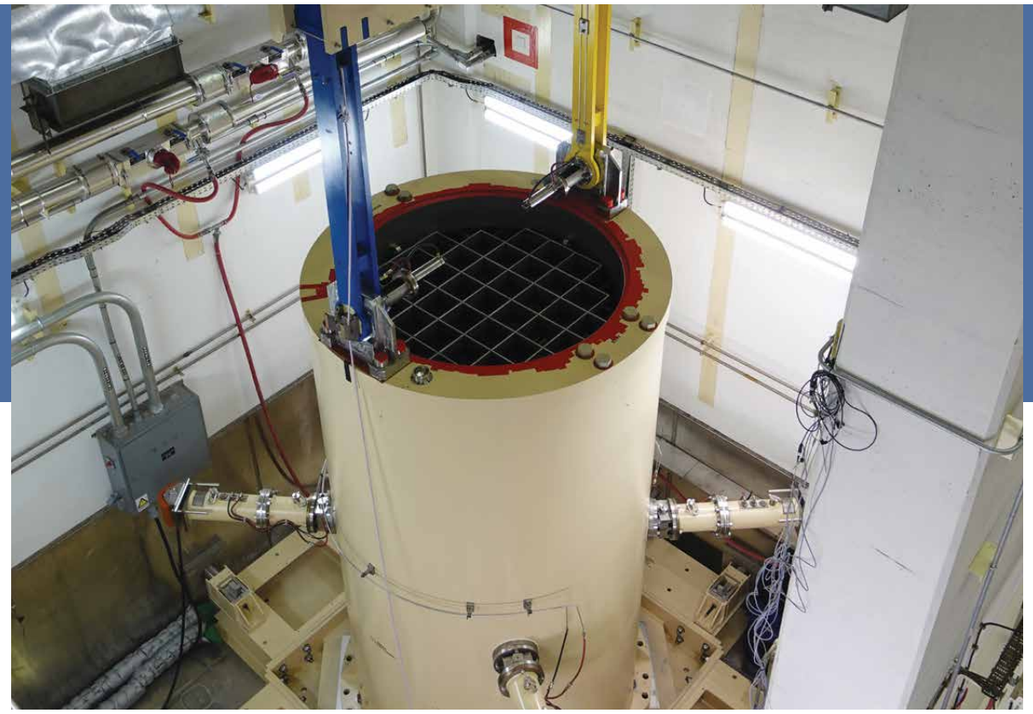
At the beginning of October 2023, we recorded the plant shutdown due to the measured increased leakage of the primary system inside the containment. The leak had no impact on employees, the population, or the environment and was below the value set as a limit by the Technical Specifications. Due to the specific leak location and complex intervention to repair the deviation, a more comprehensive action was necessary, which included various companies, institutions, SNSA, and its one multidisciplinary team for independent verification. It was a leaking pipeline that is part of the safety systems. There was no impact on safety as the pipeline performed its safety function. According to the INES scale, the event is rated as level 0. The root cause analysis is underway. The repair was carried out in the planned time in compliance with occupational safety and health standards and radiation protection. The shutdown lasted 42 days and 16 hours.

2.1 Process Auditing

The formally defined NEK management system sets the fundamental starting points and defines the processes for ensuring nuclear safety. In doing so, we prioritize nuclear safety in all work areas. By promoting and observing the principles of safety culture at all levels, each NEK employee, within the scope of their responsibilities and powers, participates in ensuring nuclear safety and the safety of employees, the population, and the environment. The principles of our operation are expressed in the efficiency of the interdependent processes that take place at NEK and support the power plant operation.

The adequacy of NEK‘s programs and the efficiency of processes defined by these programs are verified through periodic internal audits. Considering the effect on the safe and reliable operation of the power plant, we evaluate the effectiveness of all measures that affect safety structures, systems, and components. We regularly plan audits per the NEK QA Plan. They are carried out by qualified staff who do not have direct responsibility in the areas they audit. A written report is issued on the progress and results of each audit, which is forwarded to the person in charge of the process. The report includes coordinated proposals for corrective measures to improve the situation. NEK‘s management gets acquainted with the conclusions of the audits at the management review.





In 2023, quality assurance engineers, in cooperation with other organizational units at NEK, conducted 11 internal audits, namely in the following areas:

- organization and administration: assessing compliance of the environmental management system with the ISO 14001:2015 standard and the occupational health and safety system with the ISO 45001:2018 standard;
- radiation protection, which also includes checking the compliance of accredited laboratories with the ISO/IEC 17025:2017 standard;
- chemistry and radiochemistry, which also includes checking the compliance of the accredited laboratories with the ISO/IEC 17025:2017 standard;
- radioactive waste management;
- operation;
- fire protection;
- maintenance;
- engineering – design changes;
- engineering – core and fuel;
- Corrective Action Program and operating experience;
- security – physical and cyber.

The conclusions of the internal audits confirm that the established processes at NEK operate according to legal and standard requirements and achieve the set policies and goals. Identified discrepancies are recorded in the Corrective Action Program, and the holders and deadlines for implementing corrective measures are determined. The implementation of corrective measures is regularly monitored, and their effectiveness is checked.

2.2 Observations and Coaching

Observations and coaching are among the most important tools for preventing human errors at work, enabling high-quality work processes, and strengthening safety culture. Observations with coaching include observing an individual‘s behavior at work, emphasizing the desired behavior, and immediately correcting what is not following expectations. The primary purpose of observations is not to criticize an individual but to detect deviations or areas for improvement in work processes.

The group for monitoring the effectiveness of the observation program continued its activities. Its purpose is to monitor the findings of analyses of observations with coaching from various organizational units, identify deviations in work processes, and propose improvements.

In the minutes of the meetings, the main findings of the analysis of individual activities from the e-form were collected, and suggestions for improving the observation process were added. The results obtained from 355 observations are collected in the group‘s annual report to monitor the effectiveness of observations.

The most positive findings were in the following areas:

1. The contractor‘s general practice and knowledge
2. Preparation for work and risk assessment

The areas with the most potential for improvement in 2023 are:

1. Safety and health at work
2. Documentation, use, and adherence to procedures

3.0 FULFILLMENT OF PREREQUISITES FOR LONG-TERM OPERATION

On 5 December 2023, the Slovenian Nuclear Safety Administration (SNSA) and NEK management met. Among other things, they discussed the status of the prerequisites for the long-term operation of NEK after 2023, namely the implementation of the Safety Upgrade Program (SUP), including the SFDS project, obtaining environmental consent, the third Periodic Safety Review and handing over the LILRW to ARAO and the Fond.

The meeting of the managements of SNSA and NEK concluded that all prerequisites had been met and that all administrative bodies' decisions to extend the operation of NEK until 2043 had been implemented.

3.1 Safety Upgrade Program (SUP) with Spent Fuel Dry Storage (SFDS)

NEK has always acted preventively and responded to important events in the nuclear industry, ensuring adequate nuclear safety. It also responded quickly and efficiently after the accident in Fukushima, which occurred in March 2011.

Short-term measures were implemented immediately, i.e., in the first half of 2011. They included measures and the purchase of equipment, with which we upgraded the preparedness for beyond design bases accidents. Thus, we bought mobile water pumping equipment, electric mobile generators, air compressors, and protective and communication equipment. We added connection points for mobile equipment to the existing systems. We have also supplemented procedures and conducted additional training for such cases.

Per the long-term measures in SUP, safety solutions were updated to prevent a more severe accident or mitigate its consequences.

Project changes included:

- improving the AC power supply;
- improving the reactor core cooling (alternative cooling of the primary system and the reactor building, water injection into the primary system and the alternative auxiliary feedwater system);
- preserving the containment integrity;
- reducing possible controlled radioactive releases into the environment;
- core cooling and severe accident management from the auxiliary control room;
- alternative spent fuel pool cooling;
- construction of Operations Support Center and
- construction of SFDS.

SUP, which NEK carried out in response to the SNSA decision or as a response of the Slovenian nuclear industry to the national action plan based on the special safety review of the power plant after the accident in Fukushima, also has a long-term character and was one of the conditions for extending the power plant's operation. SUP was completed in 2021. SFDS was built in 2023, and the first 592 spent fuel elements in 16 robust casks were moved from the spent fuel pool to SFDS in August 2023. With this, NEK realized SUP in its entirety.

3.2 Environmental Consent (OVS)

After more than two years, at the beginning of 2023, the complex and extensive administrative procedure of obtaining OVS for extending the operating life of the NPP from 40 to 60 years was completed. The Ministry of Environment and Spatial Planning, which led the process by Slovenian environmental legislation and considering the provisions of the Espoo and Aarhus Conventions, issued an OVS on 13 January 2023, which consists of 300 pages. This fulfilled another key condition for the long-term plant operation after 2023.

In compliance with the Slovenian Environment Agency's (2 October 2020) decision to extend NEK's operating life from 40 to 60 years until 2043, an environmental impact assessment (EIA) and an OVS were necessary. NEK submitted its application to the Ministry in early October 2021, and with this, the process of obtaining an OVS formally began. The Project and Environmental Impact Report were attached to the application.

In Slovenia, we had a public disclosure of documents, obtained the opinions of those responsible for spatial planning, discussed the topic orally with side participants, and responded in writing to all received opinions, comments, and observations. Croatia, Austria, Italy, Hungary, and Germany joined the cross-border assessment process. Also, in this procedure, public disclosures of documentation, public presentations and hearings, and technical consultations took place. We provided written, reasoned answers to all comments, questions, and observations received.

The Ministry of Natural Resources and Spatial Planning issued an OVS to extend the NEK's operating life from 40 to 60 years, which became final on 21 February 2023. The demanding process involved more than 50 experts from NEK and institutions from Slovenia and Croatia.

3.3 Third Periodic Safety Review (PSR3)

NEK, which otherwise has an unlimited operating permit, must, by current Slovenian legislation, undergo an extensive periodic safety review every ten years. The first review was completed in 2003, and the second in 2013. The third took place at NEK from 2020 per the program approved by SNSA. The program determines the content, scope, and timeline of the review, as well as the methodology for dealing with findings from the review. In three years, NEK checked the compliance of the power plant design with legislation and international safety standards. It also reviewed the actual condition of the facility – equipment, organization, personnel, and other technical and organizational areas, which are classified into 18 safety contents.

The third periodic safety review was special because it was related to extending the operating period and new contents such as physical protection, radioactive waste, and radiation safety. NEK included in the review important additional input data, such as proposals for improving probabilistic safety analyses for fire events, the findings of the International Atomic Energy Agency (IAEA) mission for the review of the safety aspects of long-term operation (Pre-SALTO) and the new requirements of the Western European Nuclear Regulators Association (WENRA) from 2020.

In addition to NEK workers, external experts also participated in the very extensive and professionally demanding review. Independent professional authorized organizations and SNSA reviewed the thematic reports for all safety content and findings resulting from the review. Then, they checked the assessments of the safety importance of the findings, the determination of appropriate corrective measures, and the preparation of a plan for implementing these measures or a plan for changes and improvements.

SNSA issued a decision in August 2023 to review physical security. This review took place in parallel with the third periodic safety review; the action plan is underway. For the more extensive part of this review, SNSA issued a decision on 4 December 2023 approving the report on the third periodic safety review, which consists of two documents: *The 3rd NEK Periodic Safety Review – Summary Status and Global Assessment of Plant Status* and *Implementation Action Plan*. With the issuance of this decision, the last part of the process begins, i.e., implementation of the action plan in the next five-year period.

A comprehensive safety assessment is also essential, showing whether NEK is still as safe as specified in the facility design and whether the facility‘s safety will also be guaranteed in the next ten years. The comprehensive safety assessment showed a significant improvement in NEK‘s safety level since the previous periodic safety review, mainly due to safety improvements from the Safety Upgrade Program. NEK is thus prepared for long-term safe operation.

With this, NEK fulfilled the condition for extending the validity of the facility‘s operating permit.

3.4 Low- and Intermediate-Level Radioactive Waste (LILRW) and the Decision of the Interstate Commission

One prerequisite for the long-term operation of NEK is also the provision of capacities for the storage of LILRW.

On 2 October 2023, the 17th session of the interstate commission for monitoring the implementation of the Agreement between the Government of the Republic of Slovenia and the Government of the Republic of Croatia on Regulating the Status and Other Legal Relations Related to Investment in the Krško Nuclear Power Plant, its Exploitation and Decommissioning (IA) took place at NEK.

The interstate commission took note of the Coordination Committee‘s report regarding the acceptance of LILRW by the Slovenian Agency for Radioactive Waste (ARAO) and the Croatian Fond. It concluded that the handover for neither side will be in the scope and time frame (until the end of 2025) as stipulated by IA. Due to delays in constructing the repository in Vrbina at Krško and the long-term repository at Čerkezovac in Croatia, waste acceptance will not be possible before 2028. The interstate commission, therefore, ordered the Fond and ARAO to start the construction of the long-term repository Čerkezovac and the LILRW Vrbina repository as soon as possible and, at the latest, at the beginning of 2028, start taking over LILRW from NEK.

The interstate commission also orders NEK to provide sufficient capacities for storing LILRW until its handover in early 2028. Waste incineration, melting, and supercompacting are already underway for this purpose. An even greater emphasis is placed on decontamination, enabling smaller quantities of radioactive waste.

4.0 TECHNOLOGICAL MODERNISATION

In 2023, we started the technical inspection of the Spent Fuel Dry Storage, the last project of the Safety Upgrade Program.

Among the other significant technological improvements were the relocation and modernization of the Central Alarm Center (GVNC) and Auxiliary Alarm Center (PVNC) as part of the modernization of technical security systems, replacement of the air compressor, upgrade of the radio communication system, and finishing works on the outage parking lot.

Work intensively took place on developing project documentation and procuring and producing equipment for the projects, which are expected to be carried out between regular online operation and an outage in April 2024.

Among the projects that we finished in 2023 or will continue in 2024, we highlight the most important:

4.1 Ensuring Safety and Operational Reliability

4.1.1 RELOCATION AND MODERNIZATION OF THE CENTRAL ALARM CENTER (GVNC) AND AUXILIARY ALARM CENTER (PVNC)

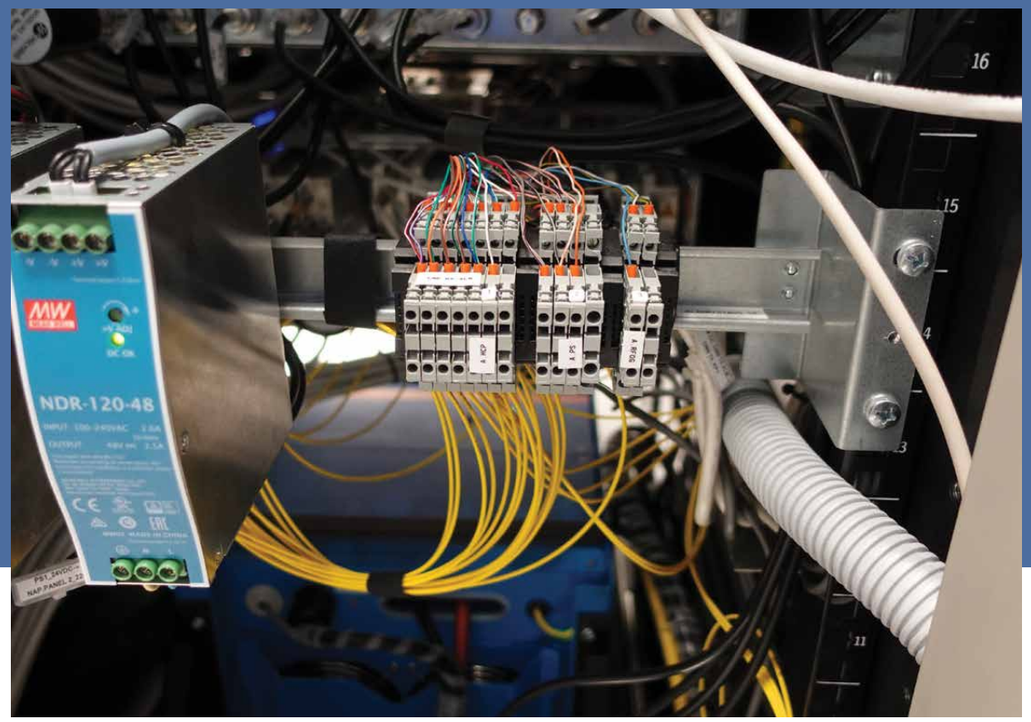
The modification, which continues in 2024, includes constructing the Central Alarm Center (control room, computer equipment room, power supply equipment room, vestibule) and renovating the existing Auxiliary Alarm Center.

4.1.2 REPLACING THE AIR COMPRESSOR (CA) AND REMOVING THE THIRD INSTRUMENTATION AIR COMPRESSOR (IA)

With the modification, we replaced the old piston air compressor with a new screw compressor. We also removed the old third instrumentation air compressor. All startup tests were successful.

4.1.3 REPLACEMENT OF THE RADIO COMMUNICATION SYSTEM

We updated the outdated wireless communication system and installed a satellite communication system. At the same time, we replaced the system of radio stations, distribution panels, radio consoles, and satellite phones.



4.1.4 OUTAGE PARKING LOT

We arranged a parking lot for 560 new car spaces, 40 of which are ready for the installation of charging stations for electric cars. The work is finished, and the technical inspection will follow.

4.1.5
REPLACING COMPONENT COOLING SYSTEM HEAT EXCHANGERS

The old Component Cooling heat exchangers were designed for an operating life of 40 years. Their biggest problem was the degradation of construction materials, dominated by erosion-corrosion and pipe leaks. Both must be replaced for the long-term operation of NEK. We replaced the first in the 2022 outage; we will replace the second in the 2024 outage.

4.1.6
UPDATE OF PARMS RADIATION MONITORS

With the modification, we will update or replace the radiation monitors PARMS (Post-Accident Radiation Monitoring System) due to obsolescence, the related unavailability of spare parts, and administrative requirements. In the 2022 outage, we relocated the R-04 monitor, which was installed in the corridor in front of the pump rooms, to the centrifugal charging pump 1 room. We bought and installed a measuring channel in the centrifugal charging pump 2 room. The R-24 monitor is under construction and will be installed during the outage in 2025.

4.1.7
MODERNISATION AND ADAPTATION OF RADIOACTIVE WASTE (RW) HANDLING SYSTEMS – PREPARATION FOR HANDING OVER LILRW PER THE INTERGOVERNMENTAL AGREEMENT (IA)

By modernizing and adapting the systems for handling RW, we are creating prerequisites for the handover of LILRW packages to ARAO and the Fond by the IA and guaranteeing capacities for LILRW storage until the start of the takeover. The project includes the purchase and installation of handling and transport equipment necessary for transferring packages from the temporary storage and inserting them into transport and transfer-storage casks, transport of casks, equipment for radiation monitoring and protection, remote control, decontamination equipment, and other necessary equipment, within which the delivery of waste will be carried out in such a way that the dose loads of the workers will be as low as possible.

4.1.8
UPGRADE OF EVAPORATORS IN BORON RECYCLING AND LIQUID WASTE PROCESSING SYSTEMS

The modification's purpose is to replace the unit for liquid waste processing due to the system's wear and tear and the unavailability of spare parts. Liquid radioactive waste generated during operation must be processed in all phases of the power plant's operation.

With the modification, we reduce the possibility of unpredictable events that can affect the processing of liquid radioactive waste and, thus, the production and stable operation of the NPP.

4.1.9
WORK EFFICIENCY CENTER AND REDUCTION OF ENERGY SELF-CONSUMPTION

The project includes constructing the Work Efficiency Center (CDU) and installing and connecting the solar power plant above the NEK parking lot.

For both parts of the project, we obtained design conditions from all authorities in obtaining building permits and prepared documentation for obtaining opinions before issuing applications for building permits.

The Work Efficiency Center design will be completed by April 2024.

4.2
Safety Upgrade Program 2013-2023

4.2.1
TRANSFER OF SPENT FUEL TO SPENT FUEL DRY STORAGE FACILITY (SFDS)

SFDS is an independent building in the northwestern part of NEK, measuring 50 x 70 x 20 meters. A thick reinforced concrete foundation slab and exterior walls protect against flooding and allow storage casks to be anchored. Measurement of radiation and temperature is provided. The infrastructure for monitoring by the International Atomic Energy Agency is also installed.

SFDS was built in 2022; we obtained the operating permit in early 2023. Dry runs followed this and, in August 2023, the first transfer of spent fuel to SFDS, when we moved 592 spent fuel elements in 16 containers from the spent fuel pool to SFDS.

Spent fuel elements are stored in a multi-purpose canister (MPC) containing a helium atmosphere. There are 37 spent fuel elements in each canister. The thick concrete shell of the cask, where MPC is inserted, is mechanical and radiation protection. Cooling is passive, as it is ensured by free air flow between MPC and the cask's overpack. The cask's robust design protects MPC with the spent fuel from extreme weather and seismic hazards, as well as the potential fall of a commercial aircraft.

The Safety Upgrade Program project, which has been running since 2013, is thus completed.

5.0 MAJOR MAINTENANCE ACTIVITIES AND INSPECTION OF PRESSURE BOUNDARIES

We ensure the maximum availability of systems, assemblies, and devices through maintenance, operational monitoring, and upgrading. In the area of maintenance, we focus on prevention. Preventive maintenance occurs at certain time intervals, which are justified based on manufacturers‘ recommendations, international practice, and our analysis and experience. In some instances, predictive maintenance is used instead of time-based preventive maintenance, based on determining the state of the device or assembly with analytically processed measurements. Based on these, further operation is predicted, and the optimal scope and time for component restoration are determined.

However, if failure or degradation of the component or assembly still occurs, a corrective intervention is carried out, which usually includes diagnostics, error correction, and failure-cause analysis.

Maintenance interventions are carried out according to pre-prepared procedures and instructions. Interventions are concluded with a post-maintenance test, which demonstrates the equipment‘s flawlessness and the intervention‘s success. In the case of corrective interventions on equipment included in the preventive maintenance program, a detailed failure-cause analysis is performed after the intervention, and the preventive maintenance program is adjusted accordingly. The goal of maintenance is to minimize failures and maximize equipment availability.

In 2023, we did not plan a regular outage, during which we maintain and test equipment unavailable during plant operation. Due to the discovered leak on the safety injection line, we performed several activities related to opening and closing the reactor vessel and emptying and loading the core according to the recovery plan. We managed the entire set of these connected works as an emergency outage. The work coordination in this emergency outage was the same as the management of a regular outage. We invited some external companies that also participate in regular outages. In addition to repairing the leak and additional non-destructive tests, we also carried out some minor corrective interventions and activities that did not hinder the rehabilitation of the safety injection pipeline.

All planned maintenance interventions took place online. Planning interventions for such maintenance is a significant challenge because devices and assemblies must be separated from the technological process beforehand, and all energy sources must be isolated. The intervention must be as short as possible so that the failure of assemblies and devices due to maintenance is as short as possible. We need a precise timeline and coordinated actions from different departments.

In 2023, we completed 6,380 maintenance tasks per work order. Of these, 349 were corrective, and four were of the „rework“ type, where we had to repeat the work because we were unsuccessful in the first attempt. Maintenance efficiency is measured with various indicators, monitored periodically, and checked according to programs. One of the indicators is the share of corrective work orders in the total number of executed orders. This was 3.5 percent. The indicators are better than in previous operating cycles.

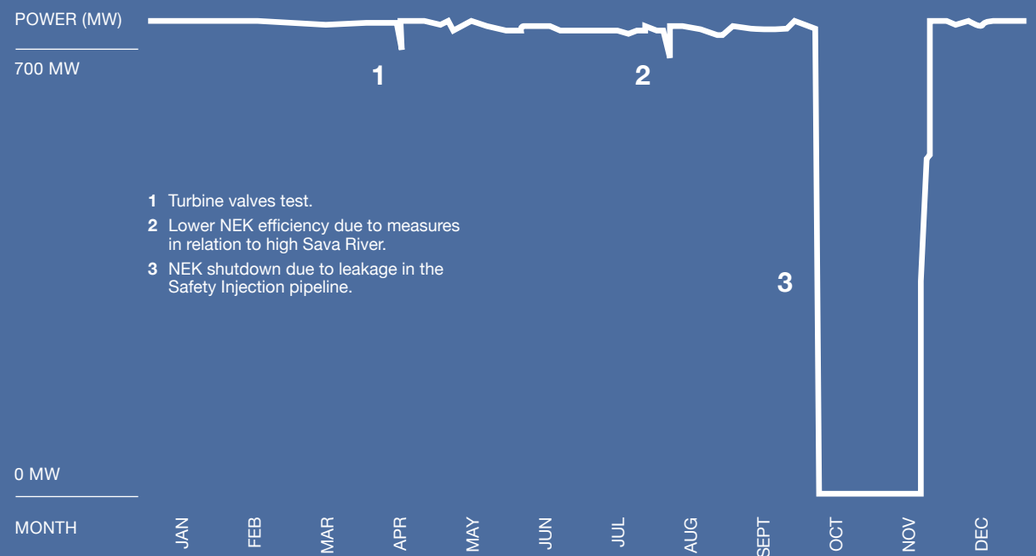
The state of assemblies and devices does not show degradations that would affect further operation. All assemblies, systems, and devices are in a condition that enables long-term operation. With the continuation of work according to the current maintenance programs, we expect that the condition of the systems, structures, and components will not deteriorate and that the technological equipment will remain in excellent condition.

6.0 PLANT PERFORMANCE

Performance indicators, which are used to continuously monitor the fulfillment of goals, efficiency, and progress in individual areas of the power plant's operation, make it possible to set new goals after improvements have been made, coordinate priorities, and provide resources for the more successful operation of the power plant. The indicators also enable comparison with other nuclear power plants.

Output diagram for 2023

Gross energy produced: 5,603,006.20 MWh
Net energy produced: 5,332,491.35 MWh
Availability factor: 88.29%
Capability factor: 87.83%



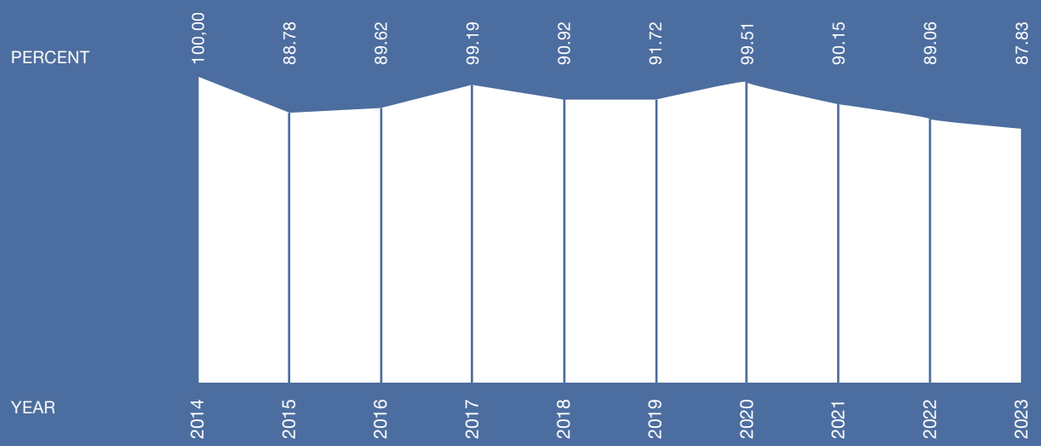
1 Turbine valves test.
2 Lower NEK efficiency due to measures in relation to high Sava River.
3 NEK shutdown due to leakage in the Safety Injection pipeline.

In 2023, NEK produced 5,603,006.20 megawatt hours of gross electrical energy or 5,332,491.35 megawatt hours of net electrical energy. The availability indicator was 88.29 percent, and the capacity indicator was 87.83 percent; both are lower due to the emergency outage in 2023. The power plant was shut down on 6 October 2023 due to a leak in the safety injection pipeline; it was reconnected with the power system on 17 November 2023.

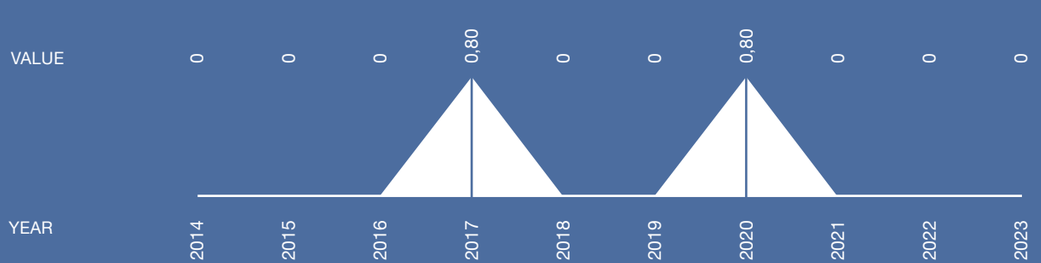
6.1 Operation

Unit Capability Factor

NEK target for 2023: ≥ 98% (original plan)



Unplanned Automatic Reactor Shutdowns, Normalised at 7000 Hours Critical

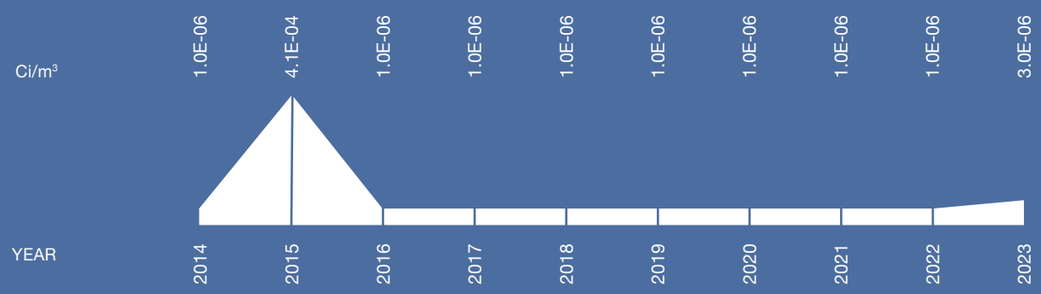


6.2 Nuclear Fuel and Chemistry of Water Media

The specific activity of the primary coolant, as well as its contamination, was below the legally permitted limits in 2023 (in fuel cycle 33). In September 2023, due to one leaking fuel element, the indicator value increased to 1.55E-5 Ci/m³. When the leaking fuel element was replaced during the emergency outage, no new leaks were detected, so in November, the indicator again had a value of 1E-6 Ci/m³. The annual average has thus been 3.0E-6 Ci/m³. In 2023, the nuclear fuel reliability indicator met the NEK and WANO target values (World Association of Nuclear Operators), confirming the reactor core's and nuclear fuel's reliable operation and management.

Nuclear Fuel Reliability Indicator

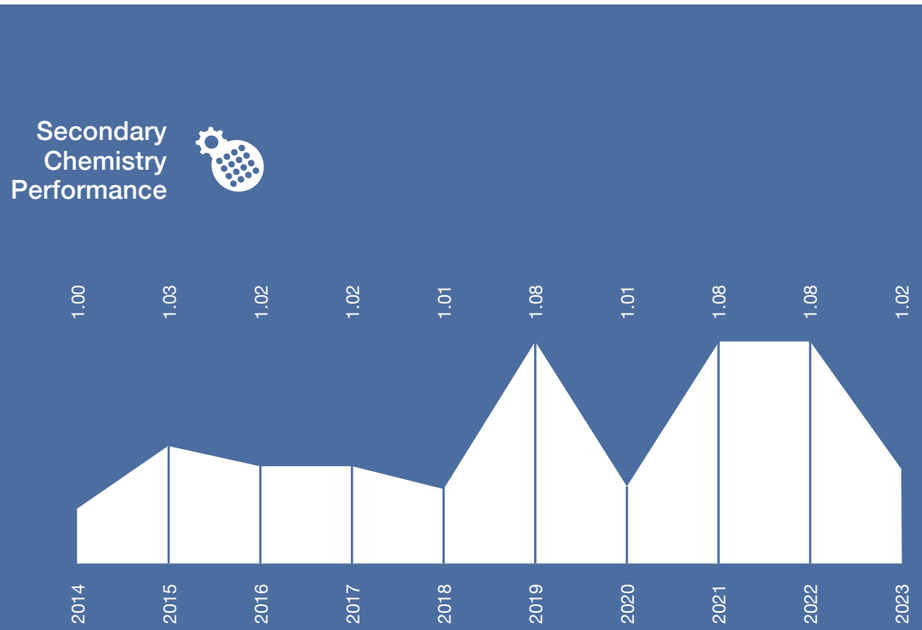
NEK target for 2023: ≤ 5.5E-5



The chemical and radiochemical parameters in the cooling water media systems were maintained without deviation per the chemical specifications‘ requirements. The WANO and NEK target values were adequate for most of the year. In the steam generator blowdown, aggressive ions, i.e., sodium, chloride, and sulfate, represent less than 20 percent of the values determined for action. The main reason for the short-term exceeding of some target values for chemistry was the plant start-up after the emergency outage.

Monitoring of chemical parameters was effective; cleaning systems that contributed to a suitable chemical program were available and effective.

With the chemistry of the water media of NEK systems, we ensure the long-term availability of the plant systems, significantly contribute to limiting degradation mechanisms and doses, and ensuring the integrity of nuclear fuel and reactor coolant.



6.3 Procurement of Goods and Services

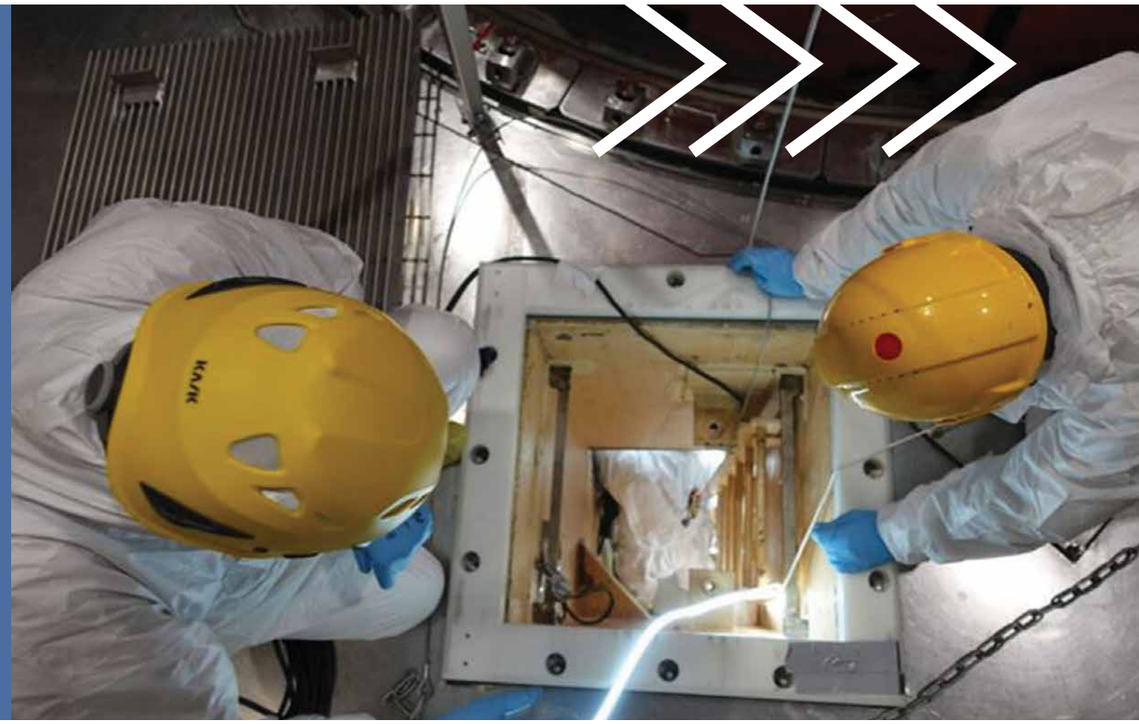
We concluded contracts for the supply of goods and services for the outage in 2024 and urgently ordered them for the emergency outage in 2023. With the procurement, we supported the first transfer of spent fuel to dry storage, the project of preparing the LILRW for removal from NEK, upgrading the technical security system, and other regular maintenance interventions and modifications.

We published 170 public contracts on the Public Procurement Portal, of which 44 were also published in the Official Journal of the EU. Based on the announcements, we received offers from 107 different providers.

NEK‘s challenge is still finding experts to do a month‘s work during the outage. There is a noticeable shortage of workers in the labor market.

In 2023, the growth of prices for goods and services moderated. Long delivery times, a feature of the nuclear industry’s supply chain, remain challenging. This issue is most noticeable with American suppliers of safety-class products. We also note the non-fulfillment of technical and quality assurance requirements of the delivered goods.

The international transport organisation was challenging, but a positive change for us was the change of logistics agent in the USA at NEK‘s contractual partner for forwarding. Air and shipping prices and logistics between the US and Europe are stabilizing.



7.0 INTERNATIONAL COOPERATION

NEK has joined many international professional organizations, which enable employees to monitor and co-create best practices, exchange knowledge and experience, and transfer them to the domestic work environment. Our active role in these organizations and international peer reviews of the power plant greatly help to improve work processes, safety, and operational results.

7.1 Our Cooperation with International Organizations in 2023

Two NEK workers worked at the WANO Paris center. One acted as a reviewer of operating experience and the other as a WANO representative for professional support to the power plants.

We have been cooperating with the WANO organization for more than three decades. Our experts participated in 62 of their missions around the world. Two representatives actively participated in the international expert peer review of the operation, the first at the Finnish Loviisa power plant and the second at the Temelin power plant in the Czech Republic.

With the technical assistance program, our power plant has hosted 37 expert missions over the past years, with topics covering various areas of the power plant.

In continuous knowledge upgrading and improving work processes and practices, NEK representatives participated in 19 benchmarking reviews at power plants abroad.

NEK representatives also attend professional training prepared by professional organizations. Our power plant‘s good results are becoming a model practice and an example of good practices for other nuclear power plant operators in various fields. Thus, we have already had 45 expert benchmarking visits to NEK. In 2023, we hosted experts from the French power company EDF twice – first at the corporate level to exchange technical information and second in the basics of power plant operation.

In 2023, NEK informed the industry through WANO about 15 operating experiences from our power plant.

In cooperation with NUPIC, NEK representatives participated in five audits of safety equipment suppliers in the USA and Europe.

NEK also actively participates in some of the more critical areas of activity of the EPRI Institute:

- equipment maintenance in nuclear power plants (NMAC);
- engineering support (PE);
- non-destructive testing and research (NDE);
- exchange of experience in applying accident analysis programs (MAAP);
- exchange of experience in the field of erosion/corrosion – CHUG;
- chemistry of water media (*Water Chemistry*).

Our power plant participated in the annual PWROG and FROG conferences, which were specially organized for nuclear power plants from European countries.

We also actively participated in the Nuclear Society of Slovenia conference and the Croatian Nuclear Society Forum.

7.2 Membership and Participation in International Organizations

At NEK, we know the importance of participating in international organizations and in the international monitoring of our operation. Only this way can we attain international comparable operation and safety results. For this purpose, NEK is a member of many organisations listed below:

WANO

All nuclear power plants worldwide are members of the World Association of Nuclear Operators (WANO). NEK has been a member of this organisation since its establishment in 1989. It aims to promote the highest operational safety standards, availability, and excellence of nuclear power plants. WANO runs programs for sharing operational experience, reviews plants' operation, assists member plants in their operational improvement programs, encourages communication, and promotes benchmarking and copying best practices.

EPRI

EPRI (Electrical Power Research Institute) is a non-profit and independent organisation for research in electrical energy production and environment protection. It was established in 1973 in support of the development of the electrical industry. The Institute currently covers all aspects of production, transmission, and use of electrical energy.

PWROG

PWROG (Pressurized Water Reactor Owners Group) is an association between the pressurized water reactor (PWR) operators and Westinghouse. The organisation offers various programs related to improved equipment, optimisation of technical specifications, reduced number of unplanned shutdowns, power uprate, simplification of the plant systems, the manufacture and use of nuclear fuel, analyses by contemporary programs and analytical methods, etc.

FROG

FROG (Framatome Owners Group) is an association of 12 nuclear reactor operators and a Framatome company. To exchange knowledge and experience, since April 2022, NPP staff can participate in ten working groups (Working Group – WG): risk management (Risk Informed Applications), reactor coolant pumps (Reactor Coolant Pump Expert), diesel engines (Diesel Engine WG), operating procedures (Operating Procedures WG), chemistry (Chemistry WG), containment (Containment WG), equipment aging and corrosion (Aging & Corrosion WG), outage optimisation (Outage Optimization WG), operation optimization (Operation Optimization WG) and steam generators (Steam Generator WG).

EC – JRC

EC – JRC (European Commission Joint Research Centre) is a joint research centre providing scientific and technical support to EU policy in several areas. NEK participates in drawing up reports on challenges and possible solutions to issues with nuclear suppliers.

ENISS

As a member of the ENISS group, NEK took part in preparing the EU nuclear industry position in drafting amendments to legislation in this industry.

ENISS is the European Nuclear Installations Safety Standards initiative. Established in 2005, it represents nuclear installation license holders from 16 European countries with nuclear power units, fuel reprocessing plants, or large waste storage facilities.

ENISS provides the nuclear industry with a platform to exchange information on national and European regulatory activities, express its views, and provide expert input on all aspects related to international safety standards. ENISS is the common channel through which European nuclear license holders interact with Western European Nuclear Regulators Association (WENRA), the European Institutions, and the International Atomic Energy Agency (IAEA).

Although ENISS is hosted by “nucleareurope”, it enjoys full autonomy regarding its strategy, priorities, and decisions, which are discussed, reviewed, and approved by its own governance bodies.

NUPIC

NUPIC (Nuclear Procurement Issues Committee) is a committee of American and other nuclear facilities that jointly evaluates safety-class equipment suppliers. This organisation aims to improve the QA process of suppliers.

IAEA (MAAE)

The International Atomic Energy Agency (IAEA) is an independent intergovernmental organisation for nuclear energy which operates within the United Nations Organisation. Its primary objective is to help members plan and use nuclear technology for various peaceful purposes. This includes the production of electrical energy and the transfer of technology and knowledge in this area. IAEA develops safety standards that support the realisation of high safety in using nuclear energy and protecting the public against ionising radiation.

The organisation operates based on various programs such as control of nuclear material, nuclear technology application, nuclear power, nuclear safety and technical cooperation. It organises missions such as OSART (Operational Safety Review Team) and SALTO (Safety Aspects of Long-Term Operation). After a detailed review, IAEA missions involve visiting plants to assess their operating safety and applying IAEA standards in practice.

NRC

NRC (Nuclear Regulatory Commission) is a USA-independent nuclear regulatory commission that ensures the safety and protection of people from radioactive nuclear material, reactors, and nuclear waste reprocessing plants. Through the Slovenian Nuclear Safety Administration and the Institute ‘Jožef Stefan’ (IJS), NEK is a member in several programs which give access to information and literature in various areas.

8.0 EXPERTISE AND COMMITMENT OF EMPLOYEES AS THE BASIS OF SUCCESS

With systematic training and a knowledge management system for employees, we ensure high professionalism and commitment. The comprehensive development of employees is one of the fundamental values that are the starting point of our operation. This helps us permanently achieve our vision and mission.

The fundamental values that are integral to all our work processes and relationships are a safety culture, excellence in relationships, and comprehensive employee development. These values are the starting point of our activities and the basis for achieving our vision and mission.

8.1 Comprehensive Staff Development

The prerequisites for the long-term safe and stable plant operation are also ensured by long-term planning of personnel processes, timely recruitment, and systematic development of employees. We know that only professionally trained and competent individuals are a prerequisite for the safe, efficient, and exemplary implementation of work processes and continuous improvements in all work areas.

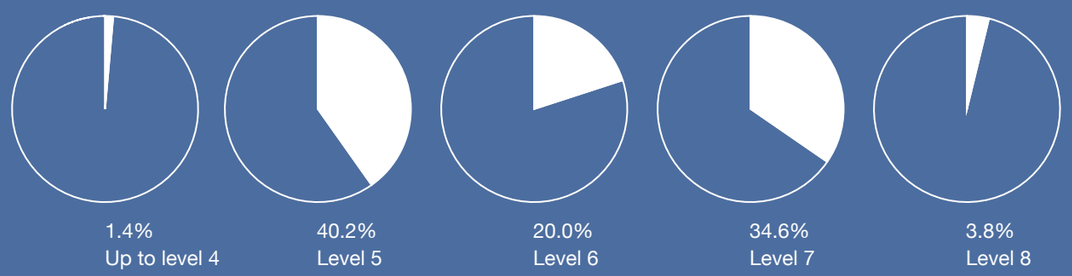
Professional training programs, established on a systematic approach, aim to acquire and renew general and professional knowledge and skills that enable the performance of all work duties at a high professional level and in compliance with international standards. We ensure knowledge retention and transfer of experience from more experienced workers to younger ones through on-the-job training programs and mentoring. In 2023, over 17,000 man-courses, or 341 courses, were attended by an average of 51 workers. We also take care of succession planning and the development of colleagues who take on key positions in the organization. In human resources, we also pay special attention to monitoring employee commitment and management processes, such as annual development dialogues.

Employees with professional knowledge and skills and appropriate values are strategic and key factors in nuclear safety, long-term stability, competitiveness, and success.

From the human resources point of view, 2023 was a year when the gradual generational replacement process, which we have witnessed in the last decade, was again stronger, as we hired 30 new workers due to the needs. In line with expectations, the gradual retirement process of employees who met the conditions for retirement also continued. The annual exit turnover was 2.9 percent, which reflects the stable personnel structure.

At the end of the year, NEK had 659 employees, of which 47.3 percent had higher professional and university education or an academic title. Among the employees are 11 PhDs and 14 Masters of Science. The share of women in the organization is 13.5 percent. At the end of the year, we had 20 scholarship recipients of the Bologna first- or second-degree university study program.

Distribution of Employees by Education Level

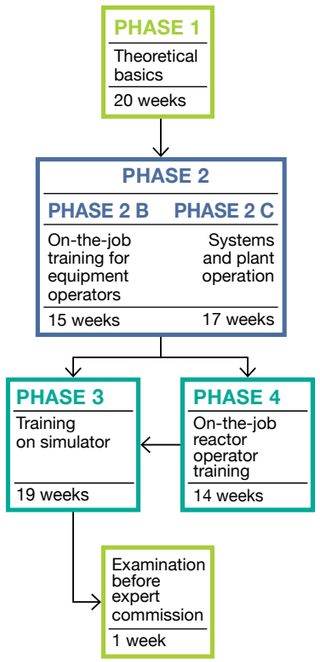


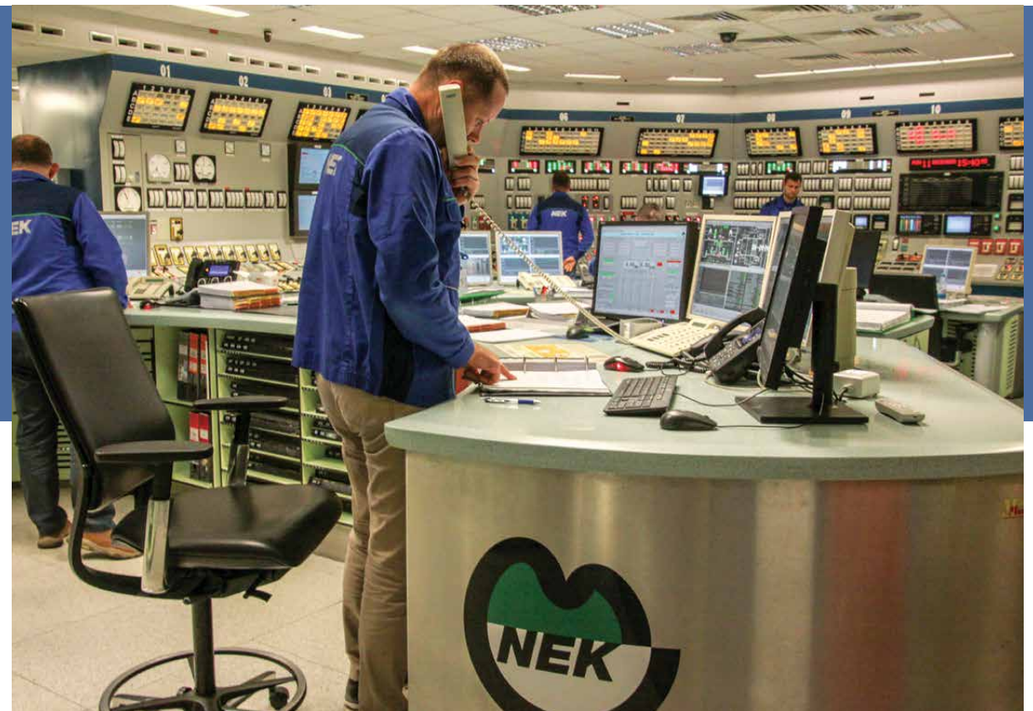
8.2 Training of Operating Staff

At NEK, we organize initial licensed staff training, continuous licensed staff training, and continuous training of equipment operators.

The initial licensed staff training for reactor operators is carried out per national legislation and nuclear industry practice requirements. The training, which lasts approximately 85 weeks, is designed so that, in four phases of different training, the participants are prepared for independent work in the main control room of NEK. In 2023, we had two groups of participants under the initial licensed staff training program.

Initial Licensed Staff Training





2 October 2023, a new group of 19 participants began training, namely Phase 1, Theoretical Basics. In the second group, 6 participants were trained on a simulator to obtain a reactor operator license, which will end in January 2024.

Continuous licensed staff training took place per the approved framework program and internal procedures. The training was conducted in four weekly segments, consisting of lectures and simulator scenarios for all operating crews and other licensed staff.

All 27 expected candidates successfully passed the examinations before the expert committee appointed by the SNSA: three obtained their first license for the main reactor operator, two received their first license for the shift engineer, six successfully renewed their license for the main reactor operator, ten the license for reactor operator and six the license for the shift engineer. Five candidates decided not to renew their licenses.

Continuous training of equipment operators took place in parallel with the training of licensed personnel in four weekly segments. The emphasis was on renewing technical skills and practical training using operating procedures in the technological facility or with the help of a full-scope simulator. The rest of the content aimed to maintain and upgrade the knowledge and skills equipment operators need.

A group of 24 people from Production attended a four-day practical training course in handling fuel change equipment at Westinghouse in the USA. The purpose of this training was to prepare the participants for the safe and high-quality performance of this vital activity during an outage.

The operating staff was trained on the full-scope simulator before carrying out more meaningful activities at the facility.

8.3
Training of the Maintenance, Engineering, and Other Support Staff

Professional training of technical personnel includes courses to acquire new general and specialist knowledge for the needs of Maintenance, Engineering, and other support functions.

Courses were organized for the technical staff, who were supposed to acquire and maintain the legally required general and specialist knowledge and skills for maintenance and other support functions.

A course in Fundamentals of Nuclear Power Plant Technology is usually conducted as part of the initial training of technical personnel. In 2023, two courses were held, namely in the winter and spring terms, for 14 participants from NEK.

Maintenance staff training programs continued in the field of specialist and legally required skills. Training needs were formulated based on matrices of necessary qualifications. The courses were partly held on the premises of the maintenance training center and the technological premises of the plant and partly in cooperation with external institutions. In addition to professional training staff, we actively involved practical training mentors from individual Maintenance units in preparing and implementing training.

According to the maintenance staff‘s continuous professional training program, we completed the renewal program of general and legally required content in three training sets. The Maintenance staff learned about new developments in the power plant‘s processes and gained domestic and foreign operating experience.

8.4
Other Legally Required and General Training

The law prescribes training in safety and health at work, fire protection, hazardous chemicals, etc. General training includes the General Employee Training (GET), the first-line supervisor training program, and others.

Regular initial and refresher training programs were held in safety and health at work, fire protection, hazardous chemicals, NZIR, and movement within power-generating facilities.

In radiation protection, initial and refresher training took place per the legislation.

The NZIR organization also carried out a more extensive drill supported by the full-scope simulator.

In addition to the training, several courses were also offered for other plant departments. These courses were intended to teach them about innovations in legislation and the introduction of innovations into individual processes. We also continued general computer literacy courses and foreign language courses.

9.0 EVENTS AFTER THE END OF THE BUSINESS YEAR

We estimate that no business events significantly impacted the company‘s financial statements for 2023 from the balance sheet data until the preparation of the annual report.

FINANCIAL REPORT

1.0 INDEPENDENT AUDITOR'S REPORT

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INDEPENDENT AUDITOR'S REPORT
to the owners of NUKLEARNA ELEKTRARNA KRŠKO d.o.o.

(Translation from the original in Slovene language)

Opinion

We have audited the financial statements of NUKLEARNA ELEKTRARNA KRŠKO d.o.o. (hereinafter "the Company"), which comprise the balance sheet as at December 31, 2023 and the income statement, statement of other comprehensive income, equity changes statement and cash flow statements for the year then ended, and summary of significant accounting policies and notes to the financial statements.

In our opinion, the accompanying financial statements are prepared, in all material respects, in accordance with provisions of the Treaty between Government of Republic of Slovenia and the Government of the Republic of Croatia on the Regulation of the Status and Other Legal Relations Regarding Investment, Exploitation and Decommissioning of the Krško Nuclear Plant (hereinafter "the Intergovernmental Treaty"), the NEK d.o.o. Contract of Members (hereinafter "the Contract of Members"), and Slovenian Accounting Standards in those parts that are not governed by the Intergovernmental Treaty or the Contract of Members.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Company in accordance with the International Code of Ethics for Professional Accountants (including International Independence Standards), issued by the International Ethics Standards Board for Accountants (IESBA Code) and other ethical requirements that are relevant to our audit of the financial statements in Slovenia, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other information

Management is responsible for the other information. The other information comprises the information included in the Annual Report other than the financial statements and our auditor's report thereon. We received other information before the date of this Independent Auditors' Report, except Supervisory Board Report which will be available after that date.

Our opinion on the financial statements does not cover the other information and we express no assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements, regulatory requirements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. With regards to these procedures, we report on the following:

- Other information is consistent with audited financial statements in all respect
- Other information is prepared in line with regulatory requirements and
- Based on our knowledge and understanding of the Company and its environment, obtained during the audit, no significant inconsistencies were found in relation to other information.

Responsibilities of Management and Supervisory Board for the Financial Statements

Management is responsible for the preparation of the financial statements in accordance with Intergovernmental Treaty, the Contract of Members and Slovenian Accounting Standards in those parts that are not governed by the Intergovernmental Treaty or the Contract of Members, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements of the Company, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Supervisory Board is responsible for overseeing the Company's financial reporting process and for confirmation of audited annual report.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in accordance with Intergovernmental Treaty, the Contract of Members and Slovenian Accounting Standards in those parts that are not governed by the Intergovernmental Treaty or the Contract of Members.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Ljubljana, March 18, 2024

BDO Revizija d.o.o.
Cesta v Mestni log 1, Ljubljana

Uroš Kavčnik
Certified auditor

(Signature on original Slovene independent auditor's report)

2.0 STATEMENT OF RESPONSIBILITY OF MANAGEMENT BOARD

Statement of Responsibility of Management Board

The Company Management Board is responsible for preparing the NEK Annual Report and Financial Statements in a manner that provides the interested public with a true and fair presentation of the financial position and business results of NEK in 2023.

The Management Board declares that:

- the financial statements have been prepared under the assumption that NEK will continue operation until the expiry of the plant's operational life;
- the company has applied selected accounting policies and discloses potential changes to accounting policies;
- the financial assessments are fair and well-thought-out, as well as in compliance with the principles of due care and due diligence;
- the financial statements with explanatory notes have been prepared per the Intergovernmental Agreement (Official Gazette of RS No. 23/2003, MP 5) and the Articles of Association (last consolidated amended version of 24 September 2019) as well as current legislation and Slovenian Accounting Standards.

The Management Board is responsible for implementing measures to ensure the value of NEK property is maintained, and fraud and other misdeeds are prevented and detected.

The Management Board affirms and accepts the financial statements and the annual report for 2023.

Krško, 15 March 2024

Gorazd Pfeifer, President of the Management Board

Saša Medaković, Member of the Management Board

3.0 INTRODUCTORY NOTES ON FINANCIAL STATEMENTS

NEK's financial statements and notes are prepared in compliance with the Intergovernmental Agreement (IA) and the Articles of Association (AA), the Companies Act (ZGD-1), and the Slovenian Accounting Standards (SRS) for areas that are not otherwise regulated in IA or AA.

The financial statements were audited by the audit company BDO REVIZIJA, d. o. o.

4.0 FINANCIAL STATEMENTS

4.1 Balance Sheet

ASSETS in EUR	31 December 2023	31 December 2022
A. Long-term assets	**416,174,481**	**445,872,439**
Tangible fixed assets	416,170,652	445,867,409
Land and buildings	146,717,902	85,657,431
Lands	2,339,398	2,340,248
Buildings	144,378,504	83,317,183
Production devices and machinery	232,051,745	273,822,140
Other devices and equipment	7,739,849	6,651,547
Tangible fixed assets being acquired	29,661,156	79,736,291
Tangible fixed assets in construction and production	29,589,264	79,664,400
Advances for the acquisition of tangible fixed assets	71,892	71,891
Long-term financial investments	3,829	5,030
Long-term loans	3,829	5,030
Long-term loans to others	3,829	5,030
B. Short-term assets	**156,468,598**	**114,576,435**
Inventories	82,819,155	68,158,620
Material	82,692,218	68,079,770
Advance payments for inventories	126,937	78,850
Short-term financial investments	30,001,132	14,002,163
Short-term loans	30,001,132	14,002,163
Short-term loans to others	30,001,132	14,002,163
Short-term operating receivables	28,294,382	15,811,036
Short-term business receivables from customers	27,614,153	9,985,960
Short-term business receivables from others	680,229	5,825,076
Cash	15,353,929	16,604,616
C. Short-term deferred expenses and accrued revenue	**1,270,319**	**1,254,072**
TOTAL ASSETS	**573,913,398**	**561,702,946**

LIABILITIES TO SOURCES in EUR	31 December 2023	31 December 2022
A. Capital	**478,959,764**	**480,953,540**
Called-up capital	353,544,826	353,544,826
Share capital	353,544,826	353,544,826
Capital reserves	41,850,000	41,850,000
Reserves from profit	89,294,326	89,294,326
Legal reserves	35,354,483	35,354,483
Statutory reserves	53,321,477	53,321,477
Other reserves from profit	618,366	618,366
Reserves from fair value revaluation	–1,924,916	68,860
Net profit or loss carried over	–3,804,472	–3,804,472
Retained net profit or loss	0	0
B. Reservations and long-term accrued costs and deferred revenue	**16,345,851**	**13,108,124**
Reservations for pensions and similar liabilities	16,118,662	12,866,528
Long-term accrued costs and deferred revenue	227,189	241,596
C. Long-term operating liabilities	**29,454,950**	**33,640,871**
Long-term operating liabilities	29,295,000	33,480,000
Long-term financial liabilities to banks	29,295,000	33,480,000
Long-term operating liabilities	159,950	160,871
Other long-term operating liabilities	159,950	160,871
Č. Short-term operating liabilities	**35,138,793**	**32,782,561**
Short-term financial liabilities	4,185,000	4,185,000
Short-term financial liabilities to banks	4,185,000	4,185,000
Short-term operating liabilities	30,953,793	28,597,561
Short-term operating liabilities to suppliers	22,628,195	21,531,993
Other short-term operating liabilities	8,325,598	7,065,568
D. Short-term accrued costs and deferred revenue	**14,014,040**	**1,217,850**
TOTAL LIABILITIES TO SOURCES	**573,913,398**	**561,702,946**

Note: The notes to the financial statements form part of the financial statements and should be read together.

4.2 Income Statement

in EUR	2023	2022
Operating revenue	**239,121,852**	**188,676,088**
Net revenue from sales	236,369,292	184,109,210
Other operating revenue	2,752,560	4,566,878
Operating expenses	**239,017,879**	**187,678,229**
Costs of materials and services	96,314,542	78,961,731
Costs of spent material	36,638,133	39,336,225
Costs of services	59,676,409	39,625,506
Costs of labour	56,423,773	47,787,559
Costs for salaries	37,890,992	33,327,941
Costs of social insurance, of which:	10,305,242	9,046,029
Pension and disability insurance costs	5,729,755	5,006,095
Additional pension insurance costs	1,512,691	1,441,701
Other costs for labour	8,227,539	5,413,589
Write-offs	73,514,369	49,071,483
Depreciation	68,471,000	44,589,000
Revalued operating expenses for fixed assets	0	1,534,199
Revalued operating expenses for working capital	5,043,369	2,948,284
Other operating expenses	12,765,195	11,857,456
OPERATING PROFIT OR LOSS FROM OPERATIONS	**103,973**	**997,859**
Financial revenue	**869,345**	**83,951**
Financial revenue from loans given	664,653	18,740
Financial revenue from loans given to others	664,653	18,740
Financial revenue from operating receivables and liabilities	204,692	65,211
Financial revenue from operating receivables from others	204,692	65,211
Financial expenses	**851,979**	**954,340**
Financial expenses from financial liabilities	355,610	436,216
Financial expenses from loans from banks	355,610	397,460
Financial expenses from other financial liabilities	0	38,756
Financial expenses from operating liabilities	496,369	518,124
Financial expenses from liabilities to suppliers and commercial instruments	114,516	446,958
Financial expenses from other operating liabilities	381,853	71,166
OPERATING PROFIT OR LOSS FROM FINANCING	**17,366**	**–870,389**
OPERATING PROFIT OR LOSS FOR THE PERIOD	**121,339**	**127,470**
Income tax	121,339	127,470
NET OPERATING PROFIT OR LOSS FOR THE PERIOD	**0**	**0**

Note: The notes to the financial statements form part of the financial statements and should be read together.

4.3 Statement of Other Comprehensive Income

in EUR	2023	2022
NET OPERATING PROFIT OR LOSS FOR THE PERIOD	**0**	**0**
Other elements of comprehensive income	**–1,993,776**	–631,996
TOTAL COMPREHENSIVE INCOME FOR THE ACCOUNTING PERIOD	**–1,993,776**	**–631,996**

Note: The notes to the financial statements form part of the financial statements and should be read together.

4.4 Cash Flow Statement

in EUR	2023	2022
A. Cash flows from operating activities		
Cash receipts from operating activities	**246,656,810**	**212,932,981**
Receipts from sales of products and services	238,262,483	207,885,941
Other receipts from operating activities	8,394,327	5,047,040
Cash disbursements from operations	**180,933,048**	**170,876,128**
Expenses for purchases of materials and services	104,269,601	101,992,764
Expenses for salaries and employee shares in profits	44,105,873	37,110,858
Expenses for all types of duties	30,560,560	30,256,820
Other operating expenses	1,997,014	1,515,686
POSITIVE OR NEGATIVE CASH FLOW STATEMENT FROM OPERATING ACTIVITIES	**65,723,762**	**42,056,853**
B. Cash flows from investing activities		
Cash receipts from investing activities	**79,632,170**	**24,007,590**
Receipts from interests received and shares in the profits of others from investments	567,022	7,590
Receipts from divestment of tangible fixed assets	65,148	0
Receipts from divestment of financial investments	79,000,000	24,000,000
Expenses from investing activities	**142,055,460**	**70,823,399**
Expenses for the acquisition of tangible fixed assets	47,055,460	54,777,326
Expenses for the acquisition of financial investments	95,000,000	16,046,073
POSITIVE OR NEGATIVE CASH FLOW STATEMENT FROM INVESTING ACTIVITIES	**–62,423,290**	**–46,815,809**
C. Cash flows from financing activities		
Cash receipts from financing activities	**0**	**0**
Receipts from called-up capital	0	0
Receipts from an increase in financial liabilities	0	0
Cash disbursements from financing activities	**4,551,159**	**4,593,009**
Expenses for interests relating to financing	366,159	408,009
Expenses for repayment of financial liabilities	4,185,000	4,185,000
POSITIVE OR NEGATIVE CASH FLOW STATEMENT FROM FINANCING ACTIVITIES	**–4,551,159**	**–4,593,009**
CLOSING CASH BALANCE	**15,353,929**	**16,604,616**
Cash flow statement for the period	**–1,250,687**	–9,351,965
Opening cash balance	16,604,616	25,956,581

Note: The notes to the financial statements form part of the financial statements and should be read together.

4.5 Equity Changes Statement

in EUR	Nominal capital	Capital reserves	Legal reserves	Statutory reserves	Other reserves from profit	Reserves from fair value revaluation	Net profit or loss carried over	Retained net profit or loss	TOTAL
Closing balance on 31 December 2022	**353,544,826**	**41,850,000**	**35,354,483**	**53,321,477**	**618,366**	**68,860**	**–3,804,472**	**0**	**480,953,540**
Opening balance on 1 January 2023	**353,544,826**	**41,850,000**	**35,354,483**	**53,321,477**	**618,366**	**68,860**	**–3,804,472**	**0**	**480,953,540**
Changes in equity – transactions with owners	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Additional paid-up capital	-	-	-	-	-	-	-	-	-
Total comprehensive income for the accounting period	**-**	**-**	**-**	**-**	**-**	**–1,993,776**	**-**	**-**	**–1,993,776**
Other elements of comprehensive income	-	-	-	-	-	–1,993,776	-	-	–1,993,776
Closing balance on 31 December 2023	**353,544,826**	**41,850,000**	**35,354,483**	**53,321,477**	**618,366**	**–1,924,916**	**–3,804,472**	**0**	**478,959,764**
Closing balance on 31 December 2021	**353,544,826**	**41,850,000**	**35,354,483**	**53,321,477**	**618,366**	**700,856**	**–3,804,472**	**0**	**481,585,536**
Opening balance on 1 January 2022	**353,544,826**	**41,850,000**	**35,354,483**	**53,321,477**	**618,366**	**700,856**	**–3,804,472**	**0**	**481,585,536**
Changes in equity – transactions with owners	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Additional paid-up capital	-	-	-	-	-	-	-	-	-
Total comprehensive income for the accounting period	**-**	**-**	**-**	**-**	**-**	**–631,996**	**-**	**-**	**–631,996**
Other elements of comprehensive income	-	-	-	-	-	–631,996	-	-	–631,996
Closing balance on 31 December 2022	**353,544,826**	**41,850,000**	**35,354,483**	**53,321,477**	**618,366**	**68,860**	**–3,804,472**	**0**	**480,953,540**

Note: The notes to the financial statements form part of the financial statements and should be read together.

5.0 GENERAL

5.1 Legal Basis

The Intergovernmental Agreement (IA) came into effect on 11 March 2003 and the Articles of Association (AA) are based thereon as the fundamental company's act. It is stipulated that mutual relationships between the two partners and the company, as well as the legal status of the company in its legal transactions, shall be regulated by IT. The ZGD-1 and the SRS apply unless IA provides otherwise for mutual relationships and criteria. In certain areas, the SRS allows for options governed by the internal procedure Accounting in NEK (hereinafter: Rules). The Financial Statements for 2023 were drawn up based on these Rules.

NEK engages only in one energy activity, which is base-load power generation, which is a commercial activity. By IA, we must supply electrical energy exclusively to the two partners, half each. The partners then sell it in the market.

The key activity is electrical energy generation, which amounts to more than 98% of all revenue. To a small extent, we engage in supplementary activities, including the plant canteen and letting out our vacation and business apartments, primarily to employees. This supplementary activity is to cover our own needs and amounts to less than one percent of all revenue or expenses in the total structure of revenue and expenses.

5.2 Presentation of Financial Statements

When drawing up the Financial Statements, we considered that NEK is a large company according to the ZGD-1; in accordance with SRS, large companies disclose all essential items set out in the Rules. For better information, we also disclose certain less important items.

Balance sheet items in the Financial Statements are presented and explained in euros (excluding cents) for the business year, which is the same as a calendar year. Items not applicable to NEK are not shown in the Financial Statements. For comparison purposes, the information is presented in two columns in the Balance Sheet; the first contains information on the last day of the current business year, and the second column contains information on the last day of the previous business year.

We draw up the income statement, which also contains elements of comprehensive income, per version I. For comparison purposes, we present data in two columns – the first column contains data for the current year and the second column for the previous year. The basis for drawing up these two statements is the gross Balance Sheet on the last business day of the year.

The Cash Flow Statement is drawn up using the direct method; its presentation is successive-tiered. The basis for drawing up the Cash Flow Statement is the recorded transactions on bank accounts. For comparison purposes, we present data information in two columns – the first column contains data for the current year and the second column for the past year.

ACCOUNTING POLICIES

The Equity Changes Statement is drawn up in a table including changes to all elements of capital; the columns illustrate elements of capital, the rows changes to these elements. For comparison purposes, we present this Statement in two columns – the first column contains data for the current year, and the second column for the previous year.

5.3 Assets and Liabilities in Foreign Currency

Assets and liabilities in foreign currency are converted into domestic currency according to the reference exchange rate of the European Central Bank, valid on the day the business event occurred and on the date of the balance sheet. Currency differences arising until the payment date and revaluation effects due to currency exchange rate changes until the date of the Balance Sheet are included in the Income Statement as financial revenue or financial expenses.

5.4 Business and Geographical Segments

NEK does not have any business and geographical segments defined.

Electrical energy is supplied to partners, GEN with its seat in Slovenia, and HEP with its seat in Croatia.

5.5 Revaluation of Assets

Asset revaluation is a change in the originally reported value of assets. We do not use the revaluation model for any group of assets, so we do not perform asset reinforcement. Impairment can occur for all assets, regardless of the selected asset presentation model, namely if the bookkeeping value of assets exceeds their replacement value.

Per the company's guidelines and the change in the accounting estimate in 2023, we impair stocks of spare parts and other materials, except for nuclear fuel, if they have not been in circulation for the past five years. We performed this impairment in previous years when the material had not been in circulation for five years.

5.6 Changes to Accounting Policies

In 2023, we didn't change the accounting policy.

5.7 Financial Risk Management

For the early identification of potential risks that could adversely affect our operations, we have established a model for identifying and monitoring these risks. We pay attention to cost and liquidity risk, as well as to market risk and various financial risks, such as currency, interest rate, credit, and investment risk, as well as the risk of rising prices of raw materials and materials and the risk of capital inadequacy.

Cost risk means that a particular risk can affect the cost price of electrical energy from NEK. We manage the risk with the mentioned model, with which, by defining the risk, we also study our exposure. The following are measures to protect against identified risks, which we constantly monitor; we also monitor and evaluate our exposure. We act as necessary to mitigate the adverse impact of risks.

We are exposed to *market risk* due to fluctuating electrical energy prices on the market. We regularly monitor data on market prices of electrical energy; current market prices are much higher than the price of electrical energy from NEK.

The risk of growth in the prices of raw materials and materials relates mainly to the increase in the prices on world markets. We minimize the risk with contractual provisions, with which we try to limit the growth of contractual values for the purchase of materials and services, as well as by considering forecasts when planning costs and expenses.

Liquidity risk is the risk that, at a particular moment, the company will not have sufficient financial resources to settle its obligations and will need additional financing. Existing long-term debt can also be a risk when looking for bridging sources, as banks also consider the financial leverage ratio and the capital ratio in their credit assessment. We regularly monitor the values of the indicators and note that we still have room for possible additional bridging debts, should they become necessary.

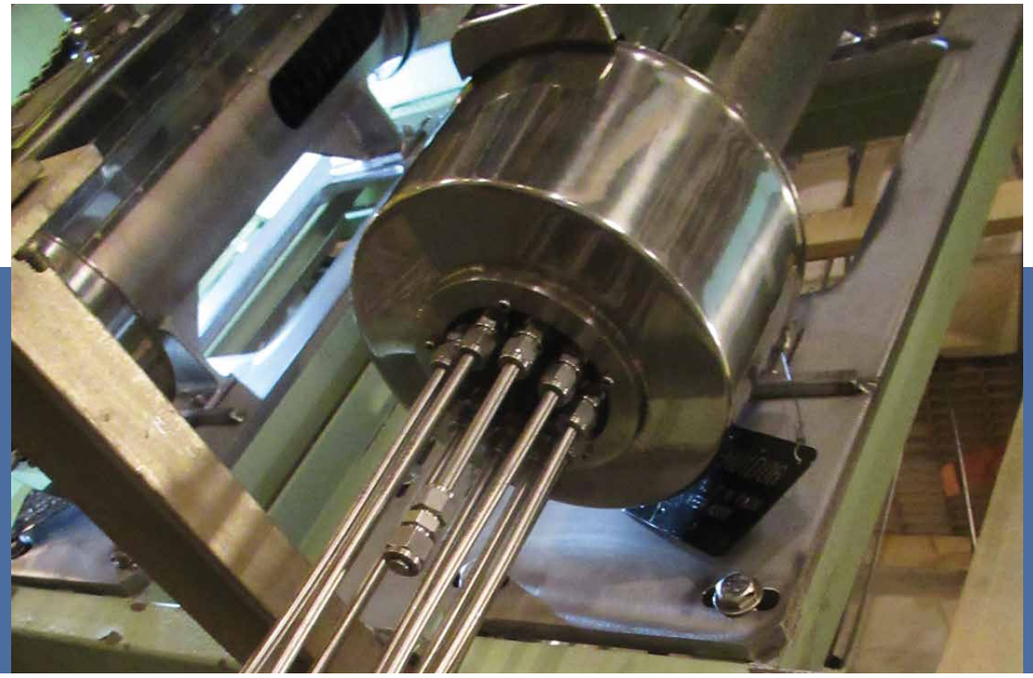
The risk of capital inadequacy means the risk of inadequate coverage of long-term assets. According to the current balance sheet data, we have all long-term assets and all inventories covered with long-term resources, so we are not currently exposed to this risk.

Currency risk arises from the volatility of exchange rates; we are exposed to it mainly due to our liabilities in foreign currencies. We strive to ensure that most liabilities are in euros and monitor the exposure monthly for liabilities in foreign currencies.

We are currently not exposed to the *interest rate risk* associated with borrowing, as we are in long-term debt at a fixed interest rate.

Credit risk refers to the possible non-payment of claims for supplied electrical energy. According to AA, the partners must settle their obligations within fifteen days of issuing the invoices. We can also stop supplying electrical energy to the partner if he does not settle his obligations within the further eight-day deadline or if he does not provide adequate insurance for the payment of his obligations. In this case, we could sell the electrical energy on the market ourselves.

Investment risk mainly refers to the risk of non-return of deposits. We minimize the risk by spreading deposits among the best banks, considering the optimal financial structure and the criterion that the cumulative amount of deposits may not exceed 0.8 percent of the bank‘s balance sheet total, and the share of deposits with an individual bank may not exceed 5 percent of NEK‘s assets.



6.0 ACCOUNTING ECONOMIC

6.1 Balance Sheet

6.1.1 TANGIBLE FIXED ASSETS

Tangible fixed assets are initially recognized at procurement value, which includes the purchase price and all costs that can be directly attributed to the preparation of the asset for its intended use (e.g., costs of delivery, installation, etc.). By IA and AA, the procurement value of the tangible fixed asset does not include borrowing costs for acquiring the tangible fixed asset until it is ready for use. By IA, we calculate depreciation costs only in the amount of approved investments and principal repayments of long-term loans. We do not increase them by interest costs from these loans.

Later incurred costs increase the procurement value, which enables an extension of the operating period, greater safety and operational reliability, or lower operating costs than the estimated initial ones. Replacement parts are treated as maintenance spare parts and are recognized in the cost of materials used.

We use the procurement value model for the valuation of tangible fixed assets.

6.1.2 DEPRECIATION

The net book value of tangible fixed assets decreases with depreciation.

Depreciation for all tangible fixed assets, except for the nuclear reactor with cooling and auxiliary systems (hereinafter referred to as the nuclear reactor), is calculated per the straight-line depreciation method, considering the useful life of the assets. The land is not depreciated.

Tangible fixed assets begin to be depreciated on the first day of the following month when they are available.

AA determines the annual cost of depreciation up to the level necessary for new investments and repayment of principals of long-term loans for such investments, determined by the long-term investment plan. The purpose of depreciation per AA is, therefore, not the replacement of tangible fixed assets at the end of their useful life, as it follows from SRS since the operating life of the power plant is limited. The purpose of depreciation is the technological upgrade of the power plant during its operating life per the highest global standards and recommendations of industrial practice.

GUIDELINES BY INDIVIDUAL CATEGORIES

Depreciation is calculated methodologically by considering valid depreciation rates for all tangible fixed assets except for the nuclear reactor. The amount of depreciation of the nuclear reactor is determined as the difference between the annual planned depreciation costs and the calculated depreciation costs of other tangible fixed assets. As a result, the rate and amount of depreciation for the nuclear reactor varies over the years. For other fixed assets, the rates remained unchanged compared to the previous year.

Depreciation rates by individual groups of tangible fixed assets can be seen in the table below.

Table: Depreciation Rates by Groups of Tangible Fixed Assets

		Depreciation rate in %
Buildings	Brick production buildings	2.1
	Simulator building	4.4
	Other brick buildings	from 3.0 to 4.75
	Vacation apartment buildings	from 3.0 to 3.9
	Other buildings	12.5
Equipment	Nuclear reactor	4.23
	Radiological waste equipment	3.1
	Radiological protection equipment	3.1
	Technical security system	5.0
	Other technological equipment	from 3.1 to 4.5
	Simulator equipment	10.0
	Computer equipment	25.0
	Commercial vehicles	from 14.3 to 30.0
	Personal vehicles	15.5
	Other equipment	from 5.0 to 20.0

6.1.3 IMPAIRMENT OF TANGIBLE FIXED ASSETS

The company checks the bookkeeping value of tangible fixed assets annually for signs of impairment. If these signs appear, the replacement value of tangible fixed assets is assessed, and the impairment is recognized in the income statement.

6.1.4 LONG-TERM FINANCIAL INVESTMENTS

Long-term financial investments are initially recognized at the procurement value, which is equal to the amount paid, expressed in cash or its equivalents.

Long-term financial investments, such as granted long-term housing loans, are measured at repayment value and are changed to preserve value. Still, they are reduced by repaid amounts and amounts that pass into the framework of short-term financial investments that fall due within a year or earlier.

Long-term financial investments represent the minimum share of long-term assets and refer to long-term financial receivables from employees for housing loans granted in the past.

If objective evidence exists that the financial investment is impaired in the long term, the impairment is recognized in the income statement as a financial expense.

6.1.5 INVENTORIES AND COSTS OF SPENT MATERIAL

Due to the nature of our production, we have neither unfinished production nor stock of semi-finished or finished products. Thus, we only have nuclear fuel, spare parts, and other material stocks.

Material stocks are originally valued at procurement price, including the purchase price, import duties, and direct procurement costs. The stock of nuclear fuel is originally evaluated according to the procurement value of the fuel in each region.

Due to the importance and the different evaluation method, we show stocks of nuclear fuel, spare parts, and other material separately. Those materials intended for investments are shown among tangible fixed assets.

The use of nuclear fuel is evaluated according to the actual price method and the consumption of other types of material, where we classify spare parts and other materials (technological fuel, chemicals, overhead material, cleaning material, office material, small inventory, and others), according to the moving average price method.

We create a 100% value adjustment for stocks of spare parts and other materials that have not had turnover in the last five years (non-sellable spare parts and non-sellable other materials).

The accounting policy of creating a value adjustment for non-sellable spare parts and other materials enables the bookkeeping value to reflect the actual value of the stock as best as possible.

By regulations, all stocks are shown as short-term assets. Spare parts and nuclear fuel stocks have a long tying period: 826 days.

Stocks of material are not encumbered with guarantees.

6.1.6 OPERATING RECEIVABLES

Receivables of all types are initially recognized in the amounts derived from the relevant documents, assuming they will also be settled. Receivables from buyers or recipients for sold or supplied electrical energy are secured by their bills of exchange.

If our claims are not settled within the regular or subsequent deadline, the bills are submitted for cashing. NEK can also stop supplying electrical energy to a partner if the latter does not pay its obligations within the further eight-day period or does not provide adequate insurance for the payment of its obligations. In this case, we can sell electrical energy on the market. If the proceeds from the electrical energy sold in this way do not cover all the costs or expenses, the partner remains obligated to pay the difference.

6.1.7 SHORT-TERM FINANCIAL INVESTMENTS

Short-term financial investments are part of the company‘s short-term assets that, as a rule, bring returns and increase financial revenue in a period shorter than a year. Among them are mainly short-term deposits with commercial banks. Upon initial recognition, they are valued at their original value according to the payment (settlement) date. After initial recognition, they are measured using the applicable interest rate method at the repayment value. If there is objective evidence that an impairment loss has occurred for loans or financial investments held until maturity, the difference between the bookkeeping value and the present value of the expected future cash flows, discounted at the effective interest rate of this asset, is recognized as financial expenses.

6.1.8 CASH

Cash includes cash at the bank in the form of money in bank accounts.

Cash is recognized in the amounts derived from the relevant documents.

6.1.9 SHORT-TERM DEFERRED EXPENSES AND ACCRUED REVENUE

Items for deferred expenses and accrued revenue are recognised if it is likely that economic benefit is to increase from them in the future and their value can be reliably measured.

Deferred expenses and accrued revenue mainly refer to short-term deferred expenses which, at the time of their recognition, are not yet due as the cost attributed to the company’s activity.

6.1.10 CAPITAL

The value of the company‘s total capital is obtained by deducting the company‘s debts and reservations from the value of all assets. It is defined by the amounts invested by the partners and the amounts resulting from operations and belonging to the partners.

Capital consists of called-up capital, capital reserves, profit reserves and fair value reserves, net result carried forward, and net result of the business year.

6.1.11 RESERVATIONS AND LONG-TERM ACCRUED COSTS AND DEFERRED REVENUE

Reservations are long-term liabilities that are probable in terms of the timing and future expenses to be paid.

Among the reservations for severance pay and jubilee awards, we recognize the liability as the present value for future claims. Period costs are recognized in the income statement, while changes in financial forecasts for severance pay upon retirement, such as a deficit or surplus, affect equity.

Long-term accrued costs and deferred revenues include pre-calculated costs or pre-calculated expenses and deferred income, which are expected to appear as an expense or revenue in a period longer than a year. Among them, we include long-term pre-calculated costs or expenses and deferred revenue for received state support for the procurement of tangible fixed assets, which decrease by the calculated depreciation of these assets.

6.1.12 LONG-TERM FINANCIAL AND OPERATING LIABILITIES

Among long-term liabilities, we show financial and operating liabilities, which are initially recognized with the amounts derived from the relevant documents.

Long-term liabilities denominated in foreign currency are revalued due to changes in the purchasing power of the domestic currency. Their increase or decrease from this title increases regular financial expenses or regular financial revenue.

6.1.13 SHORT-TERM FINANCIAL AND OPERATING LIABILITIES

Short-term liabilities of all types are initially recognized in the amounts derived from the relevant documents showing the origination of the debt.

Short-term liabilities expressed in foreign currency are revalued to maintain their actual value. Their increase or decrease from this title means regular financial expenses or regular financial revenue.

Among short-term liabilities, we also show that part of long-term liabilities that falls due in the following year after the balance sheet date.

6.1.14 SHORT-TERM ACCRUED COSTS AND DEFERRED REVENUE

Accrued Costs and Deferred Revenue are liabilities expected to occur within a year and whose occurrence is probable, and the size of which is reliably estimated.

Accrued Costs and Deferred Revenue include mainly short-term prepaid expenses.

6.1.15 CONDITIONAL ASSETS AND LIABILITIES

A conditional asset is a possible asset that results from past events and whose existence is confirmed only by the occurrence or non-occurrence of one or more uncertain future events. A conditional liability is a possible liability or a present obligation that arises from past events but is not recognized because it is unlikely that an outflow of economic benefits will be required to settle the obligation. Items of conditional assets do not directly affect the size and composition of assets and liabilities to their sources (balance sheet) and revenue and expenses (income statement), but they are a source of information about the company‘s operations and possible future liabilities.

6.2 Income Statement

6.2.1 REVENUES

Revenue includes operating revenue and financial revenue.

Operating revenue consists of the sales value of sold business effects in the accounting period if it is realistic to expect that they will be paid in exchange for goods and services. The sales price for a quantity unit (available power and active energy) of the produced electric energy consists of a constant and a variable part. We create it through the annual Business Plan, which includes a cost and production plan and a long-term investment plan so that this price covers all the company‘s costs or expenses. Before drawing up the final annual accounting statements, a calculation is generally made so that the revenues cover all the company‘s expenses. Based on the resolution of the partners’ general meeting, the positive difference can be allocated to reserves or to cover the loss carried forward. Other operating revenue includes revenue from complementary activities, potential revenue from the sale of unused property, and revenue from drawing down reservations.

Explanation 1 to SRS 15.5 specifies that, among other operating revenue, we show those related to business effects, such as subsidies, grants, benefits, compensations, premia, and similar revenue. This includes state support received from the state or local community. This sometimes appears in the form of a donation or subsidy. State support is recognized as revenue if there is reasonable assurance that the organization has met the conditions for it and that it will be received.

Financial revenue arises in connection with financial investments and receivables. They consist of calculated interest and positive exchange differences. Revalued financial revenue occurs when financial investments are disposed if the sales value exceeds the bookkeeping value.

6.2.2 EXPENSES

Expenses include operating and financial expenses.

Under operating expenses, we consider the cost of sold quantities and revalued operating expenses for tangible fixed assets and working capital. These expenses arise mainly because of the lower sales price of these assets than their bookkeeping value and because of the impairment of tangible fixed assets, inventories, operating receivables, and accrued revenue.

Financial expenses are expenses from financing and investing. The first relates to calculated interest costs, negative exchange rate differences, and revalued financial expenses. Financial expenses in investments occur due to their impairment. Any shortfall in their sales price compared to the bookkeeping value is also of this nature.

At NEK, we do not have stocks of finished products, nor stocks of unfinished production. Therefore, all costs incurred in the accounting period are treated as operating expenses and thus affect the profit in the accounting period when they are incurred.

We classify costs by natural types and by functional groups. According to their purpose or function, they are classified according to the procurement value of the quantities sold and the costs of general activities. The costs of general activities consist of the costs of materials and services of the following organizational units: Management Board, Finance, and General Administration.

6.2.3 CORPORATE INCOME TAX

NEK is liable for corporate income tax. By the Corporate Income Tax Act (ZDDPO-2), NEK is affiliated with GEN as a resident of the Republic of Slovenia (RS) and HEP as a non-resident of the RS. By the Act, they should increase revenue in the corporate income tax calculation for the difference between comparable market prices and transfer prices. IA and AA administer and determine the price at which we supply electrical energy exclusively to the partners. Therefore, we do not establish comparable market prices or increase revenues when calculating corporate income tax.

6.3 Notes to the Financial Statements

6.3.1 NOTES TO THE BALANCE SHEET

Tangible Fixed Assets and Depreciation

The company fully owns tangible fixed assets. They are mainly located at the company‘s headquarters, outside of which are mostly buildings and equipment in vacation facilities and business apartments.

The bookkeeping value of production devices and machinery decreased in 2023, as the depreciation value was higher than the activated investments. The bookkeeping values of other devices, equipment, and buildings increased because the values of capitalised investments were higher than the value of the calculated depreciation. In 2023, we capitalized on major investments: spent fuel dry storage, replacement of the high-pressure turbine and control valves, and the Mechanical Stress Improvement Process (MSIP). Investments in progress are tangible fixed assets in construction and production and mainly refer to system upgrades that ensure the safe and stable operation of the power plant. Investments in progress are those that have not yet been capitalised, namely the replacement of the Component Cooling System heat exchangers, new Technical Security Systems, and the outage parking lot of NEK.

Tangible fixed assets are not burdened with guarantees. The financial obligations for acquiring tangible fixed assets based on concluded purchase contracts amount to EUR 96,164,303.

The table showing changes in the value of fixed assets shows the change in the value of tangible fixed assets.

Table:
Changes in the Value of Tangible Fixed Assets

in EUR	Lands	Buildings	Production devices and machinery: Nuclear reactor	Production devices and machinery: Radioactive waste equipment	Production devices and machinery: Radiation protection equipment	Production devices and machinery: Technical security system	Other equipment	Investments in progress	Short-term advance payments	Investments in progress with short-term advances	TOTAL
PROCUREMENT VALUE											
Balance as of 01.01.2023	**2,340,248**	**353.617.201**	**1,362,083,549**	**46,149,373**	**96,271,515**	**17,272,722**	**53,576,982**	**79,664,400**	**71,892**	**79,736,292**	**2,011,047,882**
Procurement	-	-	-	-	-	-	-	38,774,242	-	38,774,242	38,774,242
Activations	–850	69,490,169	16,759,914	8,190	-	54,782	2,537,173	–88,849,378	-	–88,849,378	0
Reductions	-	-	-	-	-	-	–676,442	-	-	-	–676,442
Bookkeeping differences in different periods	-	-	14,043	-	-	-	-	-	-	-	14,043
Balance as of 31.12.2023	**2,339,398**	**423.107.370**	**1,378,857,506**	**46,157,563**	**96,271,515**	**17,327,504**	**55,437,713**	**29,589,264**	**71,892**	**29,661,156**	**2,049,159,725**
VALUE CORRECTION											
Balance as of 01.01.2023	**-**	**270,300,018**	**1,090,654,408**	**46,149,373**	**96,271,515**	**14,879,723**	**46,925,435**	**-**	**-**	**-**	**1,565,180,472**
Reductions	-	-	-	-	-	-	–658,006	-	-	-	–658,006
Depreciation	-	8,428,848	57,748,081	-	-	863,636	1,430,435	-	-	-	68,471,000
Bookkeeping differences in different periods	-	-	–4,393	-	-	-	-	-	-	-	–4,393
Balance as of 31.12.2023	**-**	**278,728,866**	**1,148,398,096**	**46,149,373**	**96,271,515**	**15,743,359**	**47,697,864**	**-**	**-**	**-**	**1,632,989,073**
RESIDUAL VALUE											
Balance as of 01.01.2023	**2,340,248**	**83,317,183**	**271,429,141**	**0**	**0**	**2,392,999**	**6,651,547**	**79,664,400**	**71,892**	**79,736,292**	**445,867,409**
Balance as of 31.12.2023	**2,339,398**	**144,378,504**	**230,459,410**	**8,190**	**0**	**1,584,145**	**7,739,849**	**29,589,264**	**71,892**	**29,661,156**	**416,170,652**

Long-term Financial Investments

Long-term financial investments are the minimum share of long-term assets. They refer to long-term financial receivables from employees from housing loans for solving individual constructions and purchasing apartments according to the Croatian Housing Act, amounting to EUR 3,829 (2022: EUR 5,030).

Table: Long-term Financial Investments

in EUR	Housing loans for employees	Total 2023	Total 2022
Balance as of 01.01.	**5,030**	**5,030**	**6,236**
Transfer from short-term financial investments	2,163	2,163	9,765
Repayments	–2,232	–2,232	–8,808
Divestiture	-	-	-
Impairment of financial investment	-	-	-
Transfer to short-term financial investments	–1.132	–1.132	–2,163
Balance as of 31.12.	**3,829**	**3,829**	**5,030**

The bookkeeping value of investments is equal to their procurement value. Long-term financial investments are not encumbered.

Inventories and Costs for Spent Material

On 31 December 2023, the value of inventories, together with advance payments, amounted to EUR 82,819,155. Material inventories refer to inventories of nuclear fuel, spare parts, and other materials. We had no surpluses or deficits in inventory.

Table: Value Changes in Nuclear Fuel Inventories

in EUR	Nuclear fuel in stock	Strategic inventory of nuclear fuel	Total 2023	Total 2022
Balance as of 01.01.	**37,243,999**	**0**	**37,243,999**	**24,595,756**
New purchases	39,247,678	4,013,000	43,260,678	41,617,352
Consumption	–28,039,161	0	–28,039,161	–28,969,109
Balance as of 31.12.	**48,452,516**	**4,013,000**	**52,465,516**	**37,243,999**

In 2023, we also showed a strategic inventory of enriched uranium in the nuclear fuel inventory.

Table: Changes in the Value of Inventories of Spare Parts and Other Material

in EUR	Spare parts	Other material	Total 2023	Total 2022
Balance as of 01.01.	**25,977,052**	**4,858,719**	**30,835,771**	**31,902,870**
New purchases	6,889,716	5,415,938	12,305,654	11,489,222
Consumption	–3,199,868	–4,701,570	–7,901,438	–9,611,549
Write-off	–127,362	-	–127,362	–7,339
Value correction	–3,823,101	–1,062,822	–4,885,923	–2,937,433
Balance as of 31.12. without advance payments	**25,716,437**	**4,510,265**	**30,226,702**	**30,835,771**
Advance payments for inventories	126,937	-	126,937	78,850
Balance as of 31.12. with advance payments	**25,843,374**	**4,510,265**	**30,353,639**	**30,914,621**

The net realizable value of inventories of spare parts and other material is very difficult to estimate due to certain specifics. Namely, only two similar power plants are operating worldwide, installing similar components and spare parts for maintenance. Thus, we estimate that there is practically no demand on the market for such inventories or that the cost of sales would be greater than the proceeds. The useful value of spare parts inventories, especially those in the safety class, is very high in ensuring safe plant operation.

Operating Receivables

Among operating receivables, we show receivables from partners who are also recipients of electrical energy, and other short-term receivables. Operating receivables are not encumbered as a guarantee for liabilities.

Table: Operating Receivables

in EUR	31.12.2023	31.12.2022
Short-term operating receivables from affiliated companies	**27,500,317**	**9,617,628**
GEN	15,061,925	4,885,887
HEP	12,438,392	4,731,741
Short-term operating receivables from buyers	**113,836**	**368,332**
Short-term operating receivables from others	**680,229**	**5,825,076**
Total	**28,294,382**	**15,811,036**

Short-term operating receivables from affiliated companies in the amount of EUR 27,500,317 refer to receivables for electrical energy supplied to GEN and HEP in December 2023. They are additionally increased by the debit note issued based on the AA and the decision of the Supervisory Board of NEK (receivable from GEN also includes VAT in the amount of EUR 2,623,533). Payment is due within 15 days from the invoice date.

Short-term operating receivables from buyers in the amount of EUR 113,836 refer to other receivables.

Short-term operating receivables from others amount to EUR 680,229 and refer mainly to VAT receivables, EUR 411,623; the difference of EUR 268,606 relates to receivables from employees, state institutions for the refund of gross salary compensation and contributions, and other receivables. Receivables as of 31 December 2023 are not yet due.

Receivables are not encumbered. They are insured in the amount of EUR 27,500,317. Receivables in the amount of EUR 794,065 are VAT receivables, receivables from other buyers, and other receivables that are not insured and do not represent significant recovery risks.

Short-term Financial Investments

Among short-term financial investments, we show deposits with banks and the part of long-term housing loans that fall due in the next financial year.

Table: Short-term Financial Investments Balance

in EUR	31.12.2023	31.12.2022
Deposits with banks	30,000,000	14,000,000
Part of long-term loans due for payment in 2024	1,132	2,163
Total short-term financial investments	**30,001,132**	**14,002,163**

Short-term financial investments amount to EUR 30,001,132 (2022: EUR 14,002,163). They mainly refer to deposits with commercial banks. The funds in the deposits are partly intended for the payment of outstanding obligations on 31 December 2023 and partly for investments made with deferment. Short-term financial investments are not encumbered. In 2023, interest rates were favorable.

Cash

Among cash assets, we show the balance on the transaction and foreign exchange accounts in the amount of EUR 15,353,929 (2022: EUR 16,604,616). Surplus assets are short-term and primarily intended to cover expenses for real-time operations. As of 31 December 2023, we had no cash in hand because, from 2021 onwards, we no longer have cash operations.

Short-term Deferred Expenses and Accrued Revenue

Short-term deferred expenses and accrued revenue in the amount of EUR 1,270,319 (2022: EUR 1,254,072) refer to the short-term deferred expenses of insurance premiums (EUR 997,321) and prepaid membership fees for 2024 (EUR 272,998).

Capital

The capital amounts to EUR 478,959,764 and is fully distributed equally among the two partners.

The called-up capital amounts to EUR 353,544,826 and, comes from IA and is registered at the court.

Capital reserves amount to EUR 41,850,000; they arose from subsequent payments by partners and are intended to cover expenses related to investments in safety upgrades.

Profit reserves amount to EUR 89,294,326. We created legal and statutory reserves per IA and legal reserves per ZGD-1 in the prescribed amount, i.e., 10 percent of the called-up capital. Statutory reserves are formed per AA so that all possible profits arising due to deviations of actual revenues and expenses from the planned ones or because of subsequent tax or accounting changes are distributed among them. Other profit reserves amount to EUR 618,366 and were created from allocating part of the profit from 2014 and 2016. The financial year‘s net profit can be used to cover the loss brought forward if the general meeting so decides. These reserves are intended to cover potential losses arising from the same causes.

Fair value reserves, which can be positive or negative, are derived from actuarial calculations due to changes in financial assumptions and experience in calculating reserves for severance payments for employees upon retirement. These reserves are negative and amount to EUR –1,924,916 due to the impact of the change in the collective agreement.

The loss carried forward amounts to EUR 3,804,472, of which EUR 3,155,782 from 2017 refers to the creation of additional reserves for jubilee awards and severance pay and the difference of EUR 648,690 to the recording of unused annual leave for 2017.

Reserves and Long-term Accrued Costs and Deferred Revenue

Reserves and Long-term Accrued Costs and Deferred Revenue as of 31 December 2023 amount to EUR 16,345,851 (2022: EUR 13,108,124). The main part refers to reserves for jubilee awards and severance pay in the amount of EUR 16,118,662 (2022: EUR 12,866,528). An actuarial calculation by an authorized actuary determines the amount. The following assumptions are considered during the calculation: discount rate (3.12% per year, which corresponds to a discount rate equal to the yield of ten-year bonds with a credit rating of AA in the euro area), expected operating life of the power plant (until 30 June 2043), long-term salary growth of 4% annually, employee turnover of up to 3% and employee mortality based on the latest available mortality tables of the Slovenian population. The table shows the sensitivity analysis to important actuarial assumptions.

Table: Sensitivity Analysis to Important Actuary Parameters (in EUR)

Parameter	Discrepancy	Description	Total	Severance pays	Jubilee awards	Severance pays under Article 108
Central scenario	**0.00%**	**Balance**	**16,118,662**	**9,081,203**	**2,867,064**	**4,170,395**
Discount interest rate	–0.50%	balance	16,945,170	9,117,975	2,986,215	4,840,980
		(difference)	826,508	36,772	119,151	670,585
	0.50%	balance	15,230,030	8,465,938	2,755,149	4,008,943
		(difference)	–888,632	–615,265	–111,915	–161,452
Salary growth	–0.50%	balance	15,232,429	8,467,178	2,755,597	4,009,654
		(difference)	–886,233	–614,025	–111,467	–160,741
	0.50%	balance	16,933,531	9,113,257	2,984,535	4,835,739
		(difference)	814,869	32,054	117,471	665,344
Duration (DBO)			**11.0**	**7.4**	**8.3**	**20.6**

Long-term reservations for jubilee awards and severance pay upon retirement have been formed as the present value of future payments necessary to settle obligations arising from employees‘ service in the current period and in the past. We do not expect significant deviations from the used assumptions, so we estimate the risk to be low.

Long-term accrued costs and deferred revenue of EUR 227,189 refer to deferred revenue. These refer to the funds received (in 2000 and 2001) from the budget of the Republic of Slovenia for the plant modernization and are reduced by the calculated depreciation of these funds (2022: EUR 241,596).

Table: Value Changes to Reservations and Long-term Accrued Costs and Deferred Revenue (ACDR)

in EUR	Reservations for jubilee awards	Reservations for severance pay	Long-term ACDR	Total 2023	Total 2022
Balance as of 01.01.	**2,485,230**	**10,381,298**	**241,596**	**13,108,124**	**12,392,445**
Transfer to short-term ACDR	-	-	-	-	-
Drawing reservations	–215,200	–832,608	–14,407	–1,062,215	–394,054
Creation of reservations as expenses	597,034	1,709,131	-	2,306,165	477,737
Creation of reservations as fair value reserves	-	1,993,777	-	1,993,777	631,996
Balance as of 31.12.	**2,867,064**	**13,251,598**	**227,189**	**16,345,851**	**13,108,124**

Long-term liabilities

Long-term liabilities refer to financial and operating long-term liabilities.

Table: Value Changes in the Long-term Financial Liabilities

in EUR	Long-term financial liabilities 2023	Long-term financial liabilities 2022
Balance as of 01.01.	**33,480,000**	**37,665,000**
Reduction	–4,185,000	–4,185,000
Balance as of 31.12.	**29,295,000**	**33,480,000**

The long-term financial liabilities amount to EUR 29,295,000. They refer to a long-term loan for financing investments into SUP, taken out in November 2019. The liabilities started to decrease in 2023 when we started repaying the principal of EUR 4,185,000 annually. They will finally be repaid in 2031. The principal bears interest at a fixed interest rate; we do not disclose the interest rate as it is a business secret.

The reduction refers to transferring liabilities due within one year to short-term financial liabilities.

There are EUR 12,555,000 in long-term financial liabilities with more than five years of maturity.

Table: Value Changes in the Long-term Operating Liabilities

in EUR	Long-term operating liabilities 2023	Long-term operating liabilities 2022
Balance as of 01.01.	**160,871**	**161,798**
Transfer from short-term liabilities	1,623	7,777
Repayments	–1,427	–7,081
Transfer to short-term liabilities	–1.117	–1,623
Balance as of 31.12.	**159,950**	**160,871**

Long-term operating liabilities amount to EUR 159,950. They refer to liabilities to the Croatian Housing Fund for sold apartments in compliance with regulations. There is no maturity date longer than five years.

We have no long-term operating liabilities with more than five years of maturity.

Short-term Liabilities

Short-term liabilities refer to financial and operating short-term liabilities.

Short-term financial liabilities amount to EUR 4,185,000. They relate to two principal installments of the long-term loan due in 2024.

Table:
Balance of Short-term Operating Liabilities

in EUR	31. 12. 2023	31. 12. 2022
Short-term operating liabilities to suppliers	**22,628,195**	**21,531,993**
Domestic suppliers	8,713,860	7,928,655
Foreign suppliers	13,675,441	12,914,139
For unbilled goods and services	238,894	689,199
Short-term operating liabilities to others	**8,325,598**	**7,065,568**
Employees	5,113,527	4,622,473
State and other institutions	2,743,273	2,070,052
Other short-term liabilities	468,798	373,043
Total	**30,953,793**	**28,597,561**

Short-term operating liabilities to suppliers amount to EUR 22,628,195 and refer to liabilities not yet due for payment for purchasing fixed and operating assets and the non-invoiced supply of goods and services.

Short-term operating liabilities to others refer to liabilities to employees for salaries and other labor costs for December 2023 (EUR 5,113,527), liabilities to state and other institutions (EUR 2,743,273), liabilities for interest on loans (EUR 84,388), and to other minor liabilities (EUR 384,410).

Short-term Accrued Costs and Deferred Revenue

Accrued costs and deferred revenue as of 31 December 2023 amount to EUR 14,014,040 (2022: EUR 1,217,850). EUR 851,258 (2022: EUR 923,416) refers to the deferred expenses for unused annual leave for the year 2023, EUR 252,683 (2022: EUR 294,434) to other deferred labor costs for the award to the Management Board and executive directors together with contributions, and EUR 12,910,099 to the accrued costs of outage services.

Conditional Assets and Liabilities

We do not show any conditional assets and liabilities.

6.3.2 NOTES TO THE INCOME STATEMENT

Revenue

Revenue is broken down into operating and financial.

Operating revenue is divided into net sales revenue and other operating revenue. Net sales revenue includes revenue from supplied electrical energy, half of which is in Slovenia and half in Croatia.

Table:
Operating Revenue

in EUR	2023	2022
Net sales revenue	**236,369,292**	**184.109.210**
Revenue from electrical energy supplied to GEN	118,184,646	92,054,605
Revenue from electrical energy supplied to HEP	118,184,646	92,054,605
Other operating revenue	**2,752,560**	**4,566,878**
Total	**239,121,852**	**188,676,088**

Other operating revenue includes revenue from complementary activities and other operating revenue as well as revenue from the use of vacation and work apartment rentals, elimination of reservations from received funds from the budget of the Republic of Slovenia, revenue from the sale of waste material, and other revenue.

Table: Other Operating Revenue

in EUR	2023	2022
Revenue from supplementary activities	**1,858,134**	**1,675,129**
Revenue from providing meals to workers	1,548,335	1,398,390
Revenue from work and vacation apartments	309,799	276,739
Other operating revenue	**894,426**	**2,891,749**
Reimbursed compensation for sick leave	465,082	901.151
Reimbursed compensation for workers posted abroad	347,194	320,375
Cancellation of reservations received from RS	14,408	33,186
Revenue from the sale of waste material	24,398	82,066
Revaluated operating revenue from HESS	-	1,534,199
Other operating revenue	43,344	20,772
Total	**2,752,560**	**4,566,878**

Financial revenue from operating receivables and liabilities arose due to exchange rate differences based on revaluation and amounts to EUR 204,692 (2022: EUR 65,211).

Financial revenue from loans given to others is interest received from deposits and amounts to EUR 664,653 (2022: EUR 18,740).

Expenses

At NEK, we do not have stock of finished products or stock of unfinished production. Therefore, all incurred costs are also treated as operating expenses and thus affect the result in the accounting period.

Operating expenses in the amount of EUR 239,017,879 (2022: EUR 187,678,229) cover all operating costs, which are broken down by types and functional groups.

Table: Costs by Types and Functional Groups

in EUR	2023	2022
COSTS BY TYPES	**239,017,879**	**187,678,229**
Cost of material and services	**96,314,542**	**78,961,731**
Costs of spent material	36,638,133	39,336,225
Energy costs	28,591,913	29,386,614
Costs of spare parts	3,355,990	5,467,465
Costs of other material	4,690,230	4,482,146
Costs of services	59,676,409	39,625,506
Maintenance costs of fixed assets	32,121,134	15,649,470
Costs of payment transactions and insurance premiums	3,205,285	2,819,697
Costs of services in the product manufacture	17,102,939	15,552,194
Costs of other services	7,247,051	5,604,145
Labor costs	**56,423,773**	**47,787,559**
Salary costs	37,890,992	33,327,941
Social insurance costs	8,792,552	7,604,328
Additional pension insurance costs	1,512,690	1,441,701
Other labor costs	8,227,539	5,413,589
Write-offs	**73,514,369**	**49,071,483**
Depreciation	68,471,000	44,589,000
Revalued operating expenses	5,043,369	4,482,483
Other operating expenses	**12,765,195**	**11,857,456**
COSTS BY FUNCTIONAL GROUPS	**239,017,879**	**187,678,229**
Production cost of quantities sold	**230,390,012**	**179,960,232**
General activity costs	**8,627,867**	**7,717,997**

In the costs of the spent material, which amount to EUR 36,638,133, the main part is the cost of nuclear fuel in the amount of EUR 28,039,161. In the amount of EUR 59,676,409, service costs are mostly maintenance costs (EUR 32,121,134) and service costs in the product manufacture (EUR 17,102,939). The higher maintenance costs were due to the emergency outage. The labor costs in the amount of EUR 56,423,773 are costs of salaries and contributions in the amount of EUR 48,196,234. Other labour costs in the amount EUR of 8,227,539 refer to a special award for four decades of commercial operation of NEK and successful completion of the SUP, transport to and from work, subsidized meals during work, vacation allowance, created long-term reserves for jubilee awards and severance pay, and other labor costs.

The structure and number of employees by education are shown in the business report. On 31 December 2023, there were 659 employees at NEK (648 at the end of 2022). The average number of employees in 2023 was 640.

Most write-offs refer to depreciation calculated per AA and amount to EUR 68,471,000. The revaluated operating expenses mainly refer to the correction of the value of non-sellable spare parts in the amount of EUR 3,823,101, formed in compliance with the accounting guidelines. Also, in 2023, for the first time, we recognized a correction in the value of non-sellable other material in the amount of EUR 1,062,822.

Other operating expenses refer to duties and compensations for limited space use, intervention measures planning in the area of the nuclear facility, use of building land (EUR 6,783,866), water reimbursement for the use of technological water (EUR 5,247,041), and other (EUR 734,288).

Financial expenses in the amount of EUR 851,979 refer to financial expenses from interest, revaluation of receivables and debts, and interest on reservations for jubilee awards and severance pay.

Corporate Income Tax

The company is a taxpayer per ZDDPO-2 and the Corporate Income Tax Return Rules.

Table: Calculation of NEK's Corporate Income Tax

in EUR	2023	2022
Revenues	239,991,197	188,760,040
Revenue increase to tax-recognized level	0	0
Revenue decrease to tax-recognized level	0	0
Tax-recognized revenue	**239,991,197**	**188,760,040**
Expenses	239,869,859	188,632,569
Expenses increase to tax-recognized level	523,904	180,433
Expenses decrease to tax-recognized level	–2,128,579	–1,866,195
Tax-recognized expenses	**238.265.184**	**186,946,807**
Tax base 1	1,726,013	1,813,233
Tax relief	1,087,388	1,142,337
Tax base 2	638,625	670,896
Tax rate	19%	19%
Corporate income tax	121,339	127,470

Based on the ZDDPO-2R, from 1 January 2020, when determining the tax base, it is no longer possible to recognize the reduced base on the total investment value. The tax base – as the difference between tax-recognized revenue and expenses – amounts to EUR 638,625; 19% corporate income tax is charged, amounting to EUR 121,339. From the title of tax reliefs, a tax relief (including from previous years) in the amount of EUR 129,505,659 could be claimed, but only 63% of the tax base can be claimed. The unused tax relief can be claimed in the next five years.

Net Profit

According to ZGD-1, net profit is a legally defined category. It is the sum of net profit or loss, transferred profit or loss, and any increases due to reduced reserves from profit or reductions for creating profit reserves. The partners' general meeting decides on using net profit in the proposal of the NEK Management and Supervisory Board. For 2023, we recognize the net loss from 2017 in the amount of EUR 3,804,472, but we do not recognize the net profit.

Net Operating Profit or Loss for the Accounting Period

The operating profit or loss for 2023 amounts to EUR 121,339; after taxation, the net operating profit or loss for the accounting period is zero. The item "other elements of comprehensive income" for 2023 shows an actuarial deficit in the amount of EUR 1,993,776.

6.3.3 NOTES TO THE CASH FLOW STATEMENT

The cash flow statement shows developments concerning solvency. This statement is prepared using the direct method. By individual types of cash flows, we compare realized cash flows in the cash flow statement for 2023 with those realized in 2022. Revenue in 2023 amounted to EUR 326,288,980 (2022: EUR 236,940,571), while expenses amounted to EUR 327,539,667 (2022: EUR 246,292.536). Revenues were lower than expenses by EUR 1,250,687 (2022: EUR 9,351,965).

Table: Recapitulation of Revenue and Expenses by Types of Cash Flows

in EUR	2023	2022
Cash flows from operations	**65,723,762**	**42,056,853**
Cash receipts from operations	246,656,810	212,932,981
Cash disbursements from operations	180,933,048	170,876,128
Cash flows from investing	**–62,423,290**	**–46,815,809**
Cash receipts from investing	79,632,170	24,007,590
Cash disbursements from investing	142,055,460	70,823,399
Cash flows from financing	**–4,551,159**	**–4,593,009**
Cash receipts from financing	0	0
Cash disbursements from financing	4,551,159	4,593,009
Total/Net cash flow	**–1,250,687**	**–9,351,965**

6.3.4 NOTES TO THE EQUITY CHANGE STATEMENT

Changes in the value of individual capital items can be seen from the equity changes statement, point 4.5. The amount of the called-up capital as set in IA is EUR 353,544,826; it is also entered in the court register in this amount. In 2023, the capital decreased by EUR 1,993,776 due to the deficit in reserves created due to revaluation at fair value. These are shown based on actuarial calculations and are related to changes in the financial assumptions of reservations for severance pay upon retirement.

6.4 Additional explanations

6.4.1 DATA ON GROUPS OF PERSONS

We show receipts separately by the following groups of persons among the data on groups of persons: the Management Board, employees under individual contracts, and members of the NEK Supervisory Board.

Table: Receipts by Individual Groups of Persons in 2023

in EUR	Number of recipients	Receipts from employment relationship	Other receipts	Total
Board members	3	698,280	-	698,280
Employees under individual contracts	23	3,772,955	-	3,772,955
Members of Supervisory Board of NEK	10	-	101,377	101,377
Total	**36**	**4,471,235**	**101,377**	**4,572,612**

Receipts include salaries, vacation pay, and other receipts from the employment relationship. Other receipts include payments for serving on the Supervisory Board and meeting fees.

We do not show any claims for received loans, advances, or guarantees to members of the Management Board, employed under individual contracts, and members of the Supervisory Board of NEK.

The number of recipients increased compared to the previous year due to a change in the position of President of the Management Board in April when Gorazd Pfeifer replaced Stanislav Rožman. Also, in April, the term of office of the Supervisory Board of NEK members also expired, so the NEK General Meeting appointed new members of the Supervisory Board of NEK.

6.4.2 INFORMATION ON RELATED COMPANIES

The report on relationships with related companies for the year 2023 shows all transactions with related companies.

Table: Information on Related Companies

in EUR	Revenues	Expenses	Receivables	Liabilities
GEN energija, d. o. o.	118,184,646	181,870	15,061,925	-
HEP, d. d.	118,184,646	171,312	12,438,392	-
HEP ELEKTRA, d. o. o.	-	12,765	-	157
HEP ENERGIJA, d. o. o.	-	122,195	-	19,702
Total	**236,369,292**	**488,142**	**27,500,317**	**19,859**

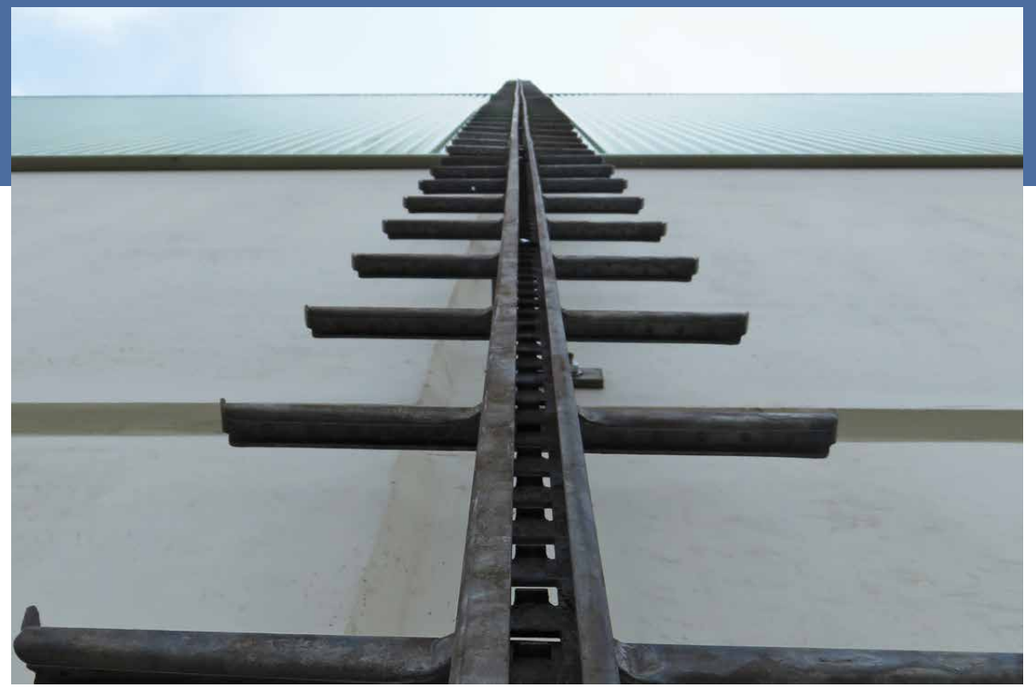
In the financial year 2023, there were no legal transactions or omissions of transactions or other actions that would have been carried out or omitted based on the interests or initiatives of GEN and HEP companies and would have meant a disadvantage for NEK in the sense of Article 545 of the ZGD-1.

6.4.3 OTHER DISCLOSURES

Other disclosures refer to the costs of auditing services, which are shown separately by type of service. In 2023, auditing the Annual Report amounted to EUR 24,450, and other costs amounted to EUR 1,170. In 2023, we also had a tax consulting service for EUR 5,500, which was not performed by the company that audited the annual report.

7.0 EVENTS AFTER THE BALANCE SHEET DATE

We assess that after the balance sheet date until the Annual Report was drawn up, there were no business events that would significantly impact the company‘s financial statements for 2023.



LIST OF ABBREVIATIONS

AA	Articles of Association
ACDR	Accrued Costs and Deferred Revenue
ARAO	Agency for Radioactive Waste
BR	Boron Recycle System
CA	Compressed Air System
CDP	Core Damage Probability
CDU	Work Efficiency Center
CEO	Chief Executive Officer
CHUG	Checkworks Users Group
DBO	Defined Benefit Obligation
EC – JRC	European Commission Joint Research Center
EIA	Environmental Impact Assessment
ENISS	European Nuclear Installations Safety Standards
ENSREG	European Nuclear Safety Regulators Group
EPRI	Electrical Power Research Institute
EU	European Union
Fond	Fund for Financing the Decommissioning of the Krško Nuclear Power Plant and the Disposal of Krško NPP Radioactive Waste and Spent Fuel
FROG	Framatome Owners Group
GEN	GEN energija, d. o. o.
GH	Waste Processing Gas System
GVNC	Central Alarm Center
HEP	Hrvatska elektroprivreda, d. d., Zagreb
HESS	Hydro Power Plants on the Lower Course of the Sava River
HP	high-pressure
HUPX	Hungarian Power Exchange
IA	Intergovernmental Agreement
IAEA	International Atomic Energy Agency
IJS	Institute „Jožef Stefan“
INES	International Nuclear Event Scale
ISEG	Independent Safety Engineering Group
ISO	International Organizations for Standardization
I&C	Instrumentation and Control
JEK2	Krško Nuclear Power Plant 2
JRC	Joint Research Center
LILRW	Low and Intermediate Level Radioactive Waste
MAAP	Modular Accident Analysis Program
MPC	Multi-Purpose Canister
MSIP	Mechanical Stress Improvement Process
NDE	Non-Destructive Examination
NEK	Krško Nuclear Power Plant
NMAC	Nuclear Maintenance Application Center
NPP	Nuclear Power Plant
NRC	Nuclear Regulatory Commission
NUPIC	Nuclear Procurement Issues Committee
NZIR	Protection and Rescue Plan
OGRS	Official Gazette of the Republic of Slovenia
OSART	Operational Safety Review Team
OVS	Environmental Consent
PARMS	Post-Accident Radiation Monitoring Systems
PE	Plant Engineering
PSR	Periodic Safety Review
PVNC	Auxiliary Alarm Center
PWROG	Pressurized Water Reactor Owners Group
QA	Quality Assurance
RS	Republic of Slovenia
RW	Radiological Waste
SALTO	Safety Aspects of Long-Term Operation
SFDS	Spent Fuel Dry Storage
SNSA	Slovenian Nuclear Safety Administration (URSJV)
SRS	Slovenian Accounting Standards
SUP	Safety Upgrade Program (PNV)
SW	Service Water
T1	Transformer 1
T2	Transformer 2
TMS	Transformer Monitoring System
UCF	Unit Capability Factor
USA	United States of America
VAT	Value Added Tax
WANO	World Association of Nuclear Operators
WD	Waste Disposal
WENRA	Western European Nuclear Regulators’ Association
WG	Working Group
WP	Liquid Waste Processing System
WT	Water Treatment
ZDDPO-2	Corporate Income Tax Act
ZGD-1	Companies Act

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