

2022 Annual Report



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Dear Reader,

Year 2022 was marked with inflation and the war in Ukraine which brought about disruptions in energy supply. An extremely dry summer with high temperatures and low river flows had an effect on reduced production of electrical energy. These conditions showed the importance of safe, reliable and predictable production of electrical energy from Krško Nuclear Power Plant which is a key factor for the stability of the Slovenian and Croatian electric power system.

Despite challenges in 2022, we reached the majority of our ambitious goals. After 513 days of uninterrupted operation, we successfully completed the production cycle and carried out the last refuelling in the initially planned operating plant period. We have created preconditions for safe long-term operation of the plant after 2023.

We successfully completed the procedure for obtaining the environmental consent by which Krško Nuclear Power Plant met one of administrative preconditions and formally obtained the permit to operate for additional 20 years. This exceptionally difficult process, involving crossborder consultation with five European states, was successfully completed within the timeframe planned. We were successful mostly due to good preparations, work coordination of the company with external organisations, good communication, expert skills and personal commitment of staff involved.

Each of our outages, including the one in 2022, has been ambitiously planned and very well prepared. In addition to refuelling, it was marked by equipment maintenance, attestation of good system status and plant structure which is necessary for extending the plant's operation after 2023, 14 complex modifications to plant's systems, including the mechanical stress improvement process, and the high-pressure turbine replacement. We hired 300 external contractors iust for these two projects. We carried out all 40,000 planned outage activities. The outage was completed in 38 days and lasted 6 days longer than planned. The main and the only reason for the delay was a fault on the special manufacturer equipment used for replacing the high-power turbine.

Our vision, mission and actions clearly put nuclear safety as the most important value. The objective measurable indicators given in this Report show that in 2022 nuclear safety and safety culture were at a very high value. The electrical energy production plan was completed at 98.4 % despite unfavourable meteorological conditions, low Sava River flow, high temperatures and extended outage. The production price of electrical energy was realised according to set measures and was slightly lower (by 2 percent) than planned, at EUR 35.49 per megawatt hour. Other goals for 2022 were also mostly realised. The 2022 business year was therefore assessed as another among successive successful business years for Krško Nuclear Power Plant.

Our plans, based on work performed and excellent cooperation and support of its owners – GEN energija and Hrvatska elektroprivreda, are to continue stable, safe and competitive operation.

In 2023, the plant will satisfy all preconditions for its safe and stable long-term operation after 2023 when its regular operating period comes to an end. Krško Nuclear Power Plant remains the foundation of the Slovenian and Croatian power system by supplying its founders and owners reliable, carbon neutral and economically competitive electrical energy.





Stanislav Rožman President of the Management Board

Saša Medaković Member of the Management Board





Even in conditions of great uncertainty in the supply of energy products and electrical energy in European space, coupled with summer low river water levels due to drought, NPP retained high operating stability and effectiveness. With consistent application of all administrative limitations, environmental restrictions and high standards in the nuclear industry, the NPP's production in 2022 was only for a percent and a half lower than planned.

In 2023, the main challenges will be retaining high operating efficiency, the completion of the first phase of moving containers with spent fuel elements to dry storage and the preparations for the distribution and handover of low- and medium-radioactive waste (LILRW) to receivers in Slovenia and Croatia. To ensure the transition to long-term operation, NPP will observe measures set out in the environmental consent and will prepare the action plan on the basis of the periodic safety review.



In 2022, the conditions were marked by high temperature and drought, causing exceptionally low water level of the Sava River. Despite extremely unfavourable weather conditions, NPP produced 5.31 terawatt hours (TWh) of electrical energy which is 1.65 less than planned 5.40 TWh.

In 2022, we were also faced with challenges associated with managing Coronavirus pandemic, especially during the outage when the number of infected staff increased fast. For this reason, we had to introduce certain protective measures during the outage. The implemented measures were effective. The spread of infection was reduced and we had sufficient number of workers in all areas. Growing absence of staff due to infection did not affect the outage and all planned outage activities were successfully completed.

The procedures for obtaining permits in accordance with spatial, environmental, construction and nuclear laws were intensively underway. All permits for outage modifications were successfully obtained before the start of outage activities.



In October 2022, pursuant to nuclear laws, the Slovenian Nuclear Safety Administration (URSJV) issued the Decision on spent fuel dry storage (SFDS); thus, all permits were obtained, resulting in satisfying the precondition for starting to construct the sixteen HI-STORM FW storage overpacks and the first phase for moving spent fuel from spent fuel pool to spent fuel dry storage. In 2022, the construction of the dry storage building within the existing NPP nuclear complex was completed. After successful technical inspection, we also obtained the operating permit in January 2023. The transfer of first 592 spent fuel elements into the dry storage is planned to take place by the end of August 2023. By doing this, NPP will complete its long-term Safety Upgrade Program (SUP).

To satisfy administrative requirements and to continue plant operation after 2023, works continued on projects for the plant's long-term operation. According to the program of the third NPP periodic safety review (PSR3), the safety factors review was carried out. Classifications of findings according to their importance is underway, as well as the preparation of a plan for changes and improvements and the final descriptive assessment of NPP safety. Complex and extensive administrative procedure for obtaining the environmental consent for extended operation of NPP from 40 to 60 years was completed after 15 months. The Ministry for the Environment and Spatial Planning, having conducted the procedure according to the Slovenian environmental protection laws and the provisions of Espoo and Aarhus Conventions, issued the environmental consent in January 2023. Intensive and challenging work towards obtaining the permit lasted more than two years, involving more than 50 experts from NPP and various institutions from Slovenia and Croatia.

In November, the external certification organisation checked and confirmed compliance of the environment treatment system with the standard ISO 14001:2015 and health and safety at work system with the standards ISO 45001:2018.

Days Year 014 016

018

OUTAGE DURATION

Training on readiness in the event of emergency situation (courses, training and exercises) were completed in according to the NPP's annual training plan. Two regular drills took place in June and December. NPP participated in a special drill of national importance called 'Nuclear accident 2022' which took place in November 2022 in the Slovenian Educational centre for the protection and rescue in the town of lg.



UNPLANNED

AUTOMATIC SHUTDOWNS



The regular outage started on 1 October 2022. Due to additional work within the project of the highpower turbine replacement, it lasted 5 days and 22 hours longer than planned 32 days. The power plant was reconnected to the electric power system on 7 November 2022.

In 2022 there were no unplanned automatic reactor shutdowns.

94.22

III. 22



NEK target for $2022: \ge 98$





For easier monitoring of efficiency and comparison between plants, the World Association of Nuclear Operators (WANO) introduced the common performance indicator index. It is calculated by weighted values of individual indicators, with the scale from 0 to 100. The common performance indicator index at the end of 2022 was slightly lower due to the weakening of chemical parameters of the secondary system and extensive works in the radiological supervised area. NPP ended the year of 2022 successfully.

III. 20

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The total collective radiation dose at the end of 2022 was slightly higher than usual due to large scope of works in the radiologically controlled area. Works on the mechanical stress improvement process contributed to half of annual collective



CHALLENGES FOR 2023

To avoid concerns, it is best to think and plan ahead. The famous quote of Winston Churchill describes well the work of staff at Krško Nuclear Power Plant when dealing with challenges brought about by its operation. They have thoroughly developed and adopted this principle in the past decades. Today, after 40 years of commercial operation of the Krško Nuclear Power Plant, the same principle made it possible for us to successfully complete preconditions for the next 20 years of its operation, instead of shutting and decommissioning the plant. In the year of transitioning onto long-term plant operation, 20 years passed since the intergovernmental treaty entered into force, providing stable sources for operating and technological upgrading of the plant, which gives to its shareholders - the Slovenian and Croatian electric power systems, a reliable supply of low-carbon electrical energy.

We continue having important challenges ahead, we are aware of them and we plan measures for their solutions or mitigation. The year 2023 will be also marked by the campaign of transferring spent fuel from the spent fuel pool into spent fuel dry storage. In order to construct the building for spent fuel dry storage within the NPP area, which will provide sufficient space for safe storage of spent fuel, a decision was made by the Inter-State committee which is the highest body of both coowners of NPP. The administrative proceedings for the installation and construction of storage involved environmental aspects and cross-border assessment. In 2023, some of the spent fuel will be moved to dry storage. At that time, all the technical preconditions should be set up and we fully prepared for the delivery of low- and intermediate level radioactive waste to the receivers from Slovenia and Croatia. We plan to prepare first packages for collection from the NPP location by the end of the year.



It will be the first time in the history of plant's operation that the plant's annual production plan will exceed six terawatt hours of electrical energy. This very ambitious plan requires perfect operation at full capacity during all 8760 hours in 2023, regardless of causes which might impede us. Exceptionally good condition of the equipment and completed outage activities of high quality, coupled with high expertise, experience and motivation of staff, are the basis for our trust in success.

In 2023, we have already completed the process of assessing environmental impacts and obtained environmental consent for additional 20 operating vears issued by the Ministry of Environment and Spatial Planning. The environmental consent sets out measures related to the protection of surface and groundwater and the impact of climate changes.

Preparations for the action plan are underway in accordance with the third periodic safety review (PSR3). We expect that URSJV will confirm our action plan, thus authorising the plant's operation for the next 10 years.

Inflation, disruptions in price increases, in the flow of goods and services required for safe and reliable operation had their impact also on the nuclear energy generation. The owners GEN and HEP recognised and approved these effects reflected in the 2023 business plan. The established principle of encouraging good partnership relationships with long-term suppliers as set out in the Code of Safety and Business Ethics, has proved to be a good foundation for managing market fluctuations.

We have been increasingly facing shortage of workforce. This trend is especially noticeable with outage subcontractors when it is necessary to provide a large number of qualified workers at short notice. We have been actively seeking sources of workforce and are trying to increase the number of providers with whom we cooperate. We have also been increasing our capacity for training and educating external contractors. A slight trend in the lack of interest for employment in NPP has also been noticed. Above average reliable and successful operation of the plant during the previous period is mostly a result of excellent team work and cooperation as well as exceptionally high safety culture of employees and subcontractors. NPP will continue to manage its active policy of increasing employee satisfaction and maintain the reputation of desirable and socially responsible employer. In doing so, it has the support of its owners. Strict regard of all administrative restrictions and performance of works at the highest working standards remain our priority tasks. Our goal is to retain our highest place under the criteria of WANO and to implement efficiently the new model of monitoring and evaluation - Action for Excellence.



The decision to build a nuclear plant in Slovenia was made because more electrical energy was needed. The plant operates safely and reliably and has an important role in the Slovenian and Croatian power sector. In accordance with high nuclear technology standards, we satisfy fundamental expectations and orientations regarding operating safety and stability, production competitiveness when compared to other resources and public acceptance. Available net energy in optimal conditions is approximately 701 megawatts. In an 18-month fuel cycles in years without outage we generate around 6,015,000 megawatt hours of electrical energy and in years with outage around 5,480,000. We put over 196,000,000 megawatt hours of electrical energy into both electrical grids.





completed.

Based on nuclear safety criteria, operating stability and business efficiency, we are among the best nuclear plants in the world.

The status of the company is governed by the Treaty concluded between the Government of the Republic of Slovenia and the Government of the Republic of Croatia on regulating the status and other legal issues related to investments in the Krško Nuclear Power Plant, its utilisation and decommissioning - Intergovernmental Treaty (Official Gazette of the RS No 23/2003, MP 5; hereinafter: IT) and the Articles of Association (Krško NPP, d. o. o., consolidated text of 24.09.2019; hereinafter: AA), concluded by the shareholders GEN energija, d. o. o., (hereinafter: GEN) and Hrvatska elektroprivreda, d. d., (hereinafter: HEP). Upon introduction of statute changes in 2003, we do not sell electrical energy but supply it exclusively to our shareholders who must accept it.

The year 2022 was marked by poor hydrological conditions, mostly during summer months which were exceptionally dry and hot. In 2022, we also carried out extremely extensive and challenging outage, with extensive maintenance and project activities. Because of difficulties in replacing high pressure turbine, the outage was slightly longer than planned, yet all planned work was successfully

To manage Coronavirus epidemiological conditions, we had reintroduced protective measures during the outage for the purpose of ensuring smooth flow of processes and uninterrupted operation.

The shareholders were supplied 5,310,695 megawatts of electrical energy. We generated a turnover in the amount of EUR 188,760,039 and expenditure in the amount of EUR 188,632,569; the difference of EUR 127,470 is expenditure for tax on profit. The final result after tax will be zero which is in accordance with the Intergovernmental Treaty.

After the Intergovernmental Treaty entered into effect, we have operated successfully and in accordance with shareholders' expectations.



ABOUT US

Company name	Krško Nuclear Power Plant, d. o. o.
Short name	NEK, d. o. o.
Company seat	Vrbina 12, 8270 Krško
Date of establishment	29.04.1974
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 electricity in thermal power stations, nuclear power stations
Registration number	5034345
Registration number Tax number	5034345 61082597
Registration number Tax number VAT identification number	5034345 61082597 Sl61082597
Registration numberTax numberVAT identification numberBank accounts	5034345 61082597 Sl61082597 Sl56 0292 4001 8793 453 NLB, d. d., Ljubljana Sl56 0315 5100 1607 765 SKB banka, d. d., Ljubljana Sl56 1010 0005 7820 337 Banka Intesa Sanpaolo, d. d. Sl56 0400 1004 8892 548 Nova KBM, d. d., Maribor
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Registration number Tax number VAT identification number Bank accounts Representatives Website	503434561082597Sl61082597Sl56 0292 4001 8793 453 NLB, d. d., Ljubljana Sl56 0315 5100 1607 765 SKB banka, d. d., Ljubljana Sl56 1010 0005 7820 337 Banka Intesa Sanpaolo, d. d. Sl56 0400 1004 8892 548 Nova KBM, d. d., MariborStanislav Rožman, President of the Management Board Saša Medaković, Member of the Management Board Saša Medaković, Member of the Management Boardwww.nek.si

MISSION, VISION AND VALUES

- We realise our mission and responsibility by:
- providing safe and stable operation which are in accordance with leading standards that ensure individual and collective safety;
- competitive production of electrical energy;
- critical self-assessment of results achieved and introducing constant improvements;
- ensuring socially acceptable operation which is transparent, ethical and environmentally positively directed;
- accepting principles set out in the IT on regulating the status and other legal issues related to investments in the NPP, its utilisation and decommissioning.



Our vision is to be an example of nuclear safety and excellence at a global level. According to criteria on nuclear safety, operating stability and business efficiency NPP is among the best operating nuclear plants worldwide.

The fundamental values are the reference line of our actions, the basis and condition for realising our vision and mission. They are part of our work processes and relationships. We live these fundamental values; we are recognised by them by the professional public and the environment.

VISION

World-wide leader in nuclear safety and excellence

MISSION

 safety stability • competitiveness • public acceptance critical self-assessment



MANAGEMENT BODIES

Management and supervisory bodies of NPP are the annual general meeting, the supervisory board and the management board, constituted in accordance with the Intergovernmental Treaty and Articles of Association. Their composition on the date of drawing up this Annual Report:

The shareholders' general meeting constitutes the two shareholders, each with 50 % shareholding, namely:

- GEN, represented by the Chief Executive Officer dr. Dejan Paravan, and Chief Operating Officer Danijel Levičar, and
- HEP, represented by the board president Frane Barbarić.

On 23.02.2022, Martin Novšak was removed from the position of the executive director of GEN. On 24.02.2022, Gordana Radanovič was temporarily appointed as the executive director, until the appointment of a new executive director. On 01.04.2022, dr. Blaž Košorok was appointed as the executive director and carried out this function until 31.10.2022. On 01.11.2022, dr. Dejan Paravan was appointed as CEO.

The supervisory board members' mandate is until 07.04.2023. The supervisory board performs its supervisory function in the composition of:

- Kažimir Vrankić, MSc. president,
- Martin Novšak deputy president,
- Robert Krklec, MSc. member,
- Josip Lebegner, MSc. member,
- dr. Rajko Pirnat member,
- Primož Stropnik member.

The company's Management Board composition is:

- Stanislav Rožman president of the board; and
- Saša Medaković board member.

Stanislav Rožman's mandate as the board president is until 10.04.2023 and the board member Saša Medaković' mandate is until 02.11.2024. On 11.04.2022, Gorazd Pfeifer will take over the position of the president of the management board after his appointment was granted at a session of the General Assembly.

COMPANY ORGANISATION

The company is designed to cover all functions which are in accordance with nuclear industry standards and regulations necessary for quality professional work processes. Due to the company's specific position, its internal organisation covers engineering and corporate functions, including independent nuclear safety function. The management system, as one of the key documents, systematically shows the primary organisational properties and defines the responsibility for management, key and support processes.

The advantage of our organisation lies in the competent and responsible structure of our employees, whose virtue lies in their high dedication and motivation. Knowledge and expertise are very important values and we ensure continuous staff development.



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.

In 2022, the NEK Supervisory Board was composed of the following members:

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

In 2022, the NEK Supervisory Board had four regular and two correspondence meetings. It monitored the company's operations and supervised its management. The basis for the board's work were written materials prepared by the company Management Board. The tasks of NEK Supervisory Board included reviewing, giving approvals, making checks, getting informed and/or accepted:

- · NEK annual report for 2021 and gave their opinion about the auditor's report;
- · Business plan for 2023, rev. 0, and gave their approval to the electric power budget price for 2023;
- · NEK long-term investment plan for safety upgrades for the following five-year period (2023-2027), rev. 23;
- · Semi-annual reports on the status of modifications II-2021 (July-December) and I-2022 (January-July);
- · Approval to signing the contract for maintenance and supportive works in technical operations for the years 2022 to 2024;
- · Approval to signing the contract for the performing of prevention and other intervention works, connected to fire safety at NEK from the years 2022 and 2023
- Approval to signing the contract for engineering and other services, necessary for carrying out the work in ING.PDO (LTO) department for the years 2022 to 2024:
- · Approval to signing the contract for continuous engineering and other supportive works in ING.MOD (design changes) department for the period 2022 to 2024;
- · Approval to signing the contract for performing the technical support for technological processes for the years 2022 to 2024 and
- The selection of company BDO Revizia for auditing the annual and semi-annual financial statements for the years 2023, 2024, and 2025;
- · Investment Programs:
 - Krško NPP Outage Parking Lot
 - Safety Upgrade Program. Reconstruction of Operational Support Center
 - Process Information System Upgrade (PIS), rev. 0 -
 - Revitalization of Waste Processing Gas System (GH), rev. 0
 - Water Treatment System Upgrade, rev. 0

- Work Efficiency Center (CDU); Station Load Power Supply Reduction, rev. 0
- Upgrade of BR (Boron Recycle) and WP (Liquid Waste Processing) System Evaporators, rev. 0;
- · Quarterly Information on Operation;
- · 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 on a monthly basis 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 2023 the NEK Supervisory Board reviewed the draft Annual Report for 2022 and found that it reflects a credible position of the company and complete information on 2022 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 2022 were in all important segments prepared in accordance 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 2022 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 which 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 2023

NEK Supervisory Board Chairman Kažimir Vrankić, MSc

STATEMENT **ON COMPANY'S** MANAGEMENT

Statement about Business Operations

Pursuant to article 70 paragraph 5 of the Companies Act the Management of the company hereby declares that in 2022 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 in accordance with 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 status is regulated with 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, the owners of the company are GEN and HEP, 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 accuracy, reliability, transparency, and clarity of all processes coupled with effective management of risk 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 plant key supportive functions. The effective system of internal controls of the work process establishes mechanisms which ensure safe and stable plant operation and its cost-effectiveness.

The accounting systems incorporate controls which ensure that:

- the umbrella regulations related to the NEK association and operations, 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 responsibilities of the General Meeting are undertaken by the owners. There were three General Meetings in 2022 passing the following resolutions:

- Annual Report 2021 was accepted,
- Discharge for 2021 was given to the Management Board and Supervisory Board and
- The auditor for the financial statements for the years 2023, 2024, and 2025 was named.

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 2022.

Krško, 15 March 2023

Stanislav Rožman, President of the Management Board

Saša Medaković, Member of the Management Board

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COMPANY'S BUSINESS POLICY

The business policy is defined by NPP's management board, taking into account the Intergovernmental Treaty and Articles of Association. The management board manages the company's operation, determines its business policy for assuring safe and reliable operation, competitive production and social acceptability.

Legislation, the Intergovernmental Treaty, nuclear industry standards and the standards of effective company management represent a framework of NPP's business. Strategic documents: Code of Safety and Business Ethics, Five-Year Development Plan, and Management System guide us towards accomplishing our mission and vision.

Code of Safety and Business Ethics gives the basic principles for our ethical and moral conduct. It defines fundamental and personal values, vision and mission, principles of conduct and action in our interrelationships. The Code directs our actions and tells us who we are, what we believe in and what we can expect from our co-workers and everyone we work with.

In our operation, NPP has constantly been facing diversity as its founders are electrical energy generating companies from Slovenia and Croatia. Important diversity extends to including American technology in the European infrastructure, legislative and cultural space and cooperation with suppliers of different cultures from Europe, America and Asia.

The shareholders' general meeting, the supervisory board and the management board of the company are aware of these diversities and therefore they subject their management to four goals: nuclear safety, competitiveness, social acceptability and critical self-assessment. NPP takes into consideration the Intergovernmental Treaty which governs its operation by the parity principle when constituting the shareholders' general meeting, the management and the supervisory boards, as well as employment laws prohibiting discrimination and maltreatment. The Code of Safety and Business Ethics and the human resources management policy are also observed.



- institutes:

RISK EXPOSURE

By a comprehensive risk management program, systematic methods, processes and activities are in place for timely detection of exposure to different types of risks which affect our business as well as operation, and ensures that all known risks are addressed, minimised and managed.

The identification of risks is carried out at all levels of the plant. Significant risks, those whose consequences could significantly affect nuclear safety, electrical energy production or personal safety, are addressed by Integrated Risk Management Committee, which is an advisory body to the NPP's board. Other risks are examined in accordance with internal programs and procedures at sessions of the expert Krško Operating Committee or by board committee for non-technical questions.

COMPANY RESEARCH AND DEVELOPMENT

NPP invests important resources and human resources into research and development:

• research work which is financed by NPP due to specific needs, for example development of new safety solutions and analysis, in cooperation with Slovenian and Croatian universities and

 research which is conducted together with research institutes from Slovenia and Croatia; these are research projects which are more fundamental, generic and from which NPP has indirect benefit.

Nuclear safety risks are addressed first and examined most thoroughly because nuclear safety of the facility is our highest priority. Nuclear safety risks and operating risks are also managed through regular investments into safety and other systems (with emphasis on SUP), taking into consideration administrative decisions in the field of nuclear safety, good practices from best plants around the world and WANO and OSART mission recommendations. We maintain high level of safety culture and awareness by all employees. Property is insured against nuclear, fire and other risks and against lightning. We also maintain insurance contracts for third party damages.

The main risk areas (in addition to nuclear safety risks referred to above) are:

Operating risks affect reliability and availability of the plant, undesired transients and shutdowns, length of outage as parameters of plant's availability. Operating risks are risks related to unplanned shutdowns, causing loss of revenue. These are protected by the Intergovernmental Treaty and the Articles of Association. The daily supply value at cost price is around EUR 506,049, the market price is around EUR 3,952,653 (the average HUPX price).

Radiological risks are risks that affect radiological safety of an individual or a group of people due to unplanned radiological exposure, external or internal communication or spread of radioactive hot particles.

Personal risks include workers' exposure in terms of classical industrial safety and injury at work.

Environmental risks are those that affect the environment, living organisms or nature due to waste and emissions from the plant.

Facility operating risks refer to inability to make key decisions on investment, maintenance and operation of the facility and its financing which includes financial risks.



risk.

Risks in the purchasing of goods, services and building refer to delays and inability to realise public procurement due to public procurement and associated processes with the National Review Commission.

Marketing risks refer mostly to risks of price drop in the electrical energy market.

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

Other risks include risks for non-performance of suppliers' obligations, unsuitable qualification processes and commercial grade item dedication for safety application, out-of-date and unavailability of components, forged products and/or declarations for the built-in components and materials.



GOALS

Goals are set in our Business Plan (BP). We list indicators and pointers which demonstrate success in managing some objectives set for 2022 and objectives planned for 2023.

PLANT PERFORMANCE	Plan 2022	Realisation 2022	Plar 2023
Performance Indicator Index	≥ 98	94.22	≥ 98
Unit Capability Factor (UCF)	≥ 90 %	89.06 %	≥ 98 %
Produced Electrical Energy (in GWh)	≥ 5,400	5311	≥ 6.015
Outage Duration	≤ 32 days	38 days	
OPERATING EVENTS			
Unplanned Automatic Reactor Trips	≤ 1 per 3 years	1 per 3 years	≤ 1 per 3 years
Operating Events, level 1 and 2	≤ 4	1	≤ 3
UNPLANNED AND PLANNED SHUTDOWNS			
Number of Unplanned Shutdowns	≤ 1 per 2 years	0 per 2 years	\leq 1 per 2 years
Forced Capability Loss	≥ 0.65 %	0.00 %	≥ 0.6 %
OPERATING RISKS ASSESSMENT			
Reactor Core Safety			
CDP/12 weeks - online	≤ 7 E-7	2.10 E-7	≤ 7 E-7
CDP/outage - during outage	≤ 3 E-5	2.72 E-5	
Reactor Fuel Reliability (Ci/m ³)	≤ 6 E-5	1 E-6	≤ 5.5 E-5
OPERATIONAL SAFETY AND HEALTH			
Collective Radiation Exposure (manSv)	≤ 0.85	1.14	≤ 0.5
Maximum Individual Dose Exposure (mSV)	≤ 10	14.03	≤ 1(
Industrial Safety Accident Rate	≤ 0.47	0.20	≤ 0.27
ECONOMIC AND PROJECT GOALS			
Estimated price /realised power cost price	≤ 35.49	34.78	≤ 38.97
Total operating costs (without depreciation in EUR million)	≤ 147.1	140.0	≤ 166
Investments into Safety Upgrade (in EUR million)	44.4	55.1	62.5

MAJOR PROJECTS	Plan 2022	Realisation 2022	Plan 2023
SUP – Phase 3			
Spent Fuel Dry Storage	80 %	80 %	100 %
NPP OPERATIONAL LIFE EXTENSION			
Periodic Safety Review (PSR3)	70 %	70 %	100 %
Assessment of effects on the environment and obtaining environmental consent	80 %	95 %	100 %
OTHER PROJECTS			
High pressure turbine replacement	100 %	100 %	
AMSAC system replacement	100 %	100 %	
Component Cooling Heat Exchanger Replacement	50 %	50 %	70 %
New Technical Security Systems (Central Alarm Station, Wireless Detection System)	30 %	30 %	60 %
Radiological Monitors PARMS Upgrade	20 %	20 %	40 %
Seismic Instrumentation System Upgrade	100 %	100 %	
Mechanical Stress Improvement Process (MSIP)	100 %	100 %	
RW Treatment System Adjustment and Upgrade – preparation for delivery of LILRW in accordance with the IT	80 %	80 %	90 %
Modernisation of Boron Recycle (BR) & Liquid Waste Processing System (WP) Evaporators			20 %
Work Efficiency Centre and Reduction of Station Load Power Supply			40 %
ATTITUDE TOWARDS THE ENVIRONMENT AND PUBLIC			
All emissions into the environment	Under regulatory restrictions	Under regulatory restrictions	Under regulatory restrictions

As evident from data above, 2022 was largely successful in realisation of set business and commercial objectives.

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1.0 Responsible **Attitude Towards** the Environment

Environmental protection is included in all work processes of NPP. The measurement results demonstrate that all effects on the environment are far from administrative limits. Authorised organisations prepare a special annual report on radiation monitoring in the surroundings of NPP. Suitability of environment management was again confirmed by the control review on complying with the environmental standards requirements ISO 14001:2015.



NPP carries out radioactive measurements of the wastewater releases into the Sava River and emissions from the ventilation system into the air. Independently, external authorised organisations measure samples in the surroundings, in particular in the area around NPP. within a distance of 12 kilometres. In addition, there are 13 automatic radiation measuring stations located in the vicinity of the plant which can detect changes in the natural level of radiation due to precipitations as well as potential changes due to the nuclear facility. The Sava River is monitored downstream for 30 kilometres from the plant by independent authorised organisations.

The objective of radiation monitoring is to monitor the plant's operation and assess the effects on the environment and the population. This ensures that prescribed limits are respected.

The effects of the NPP onto the environment are so low that they are practically immeasurable. By using models, it is possible to calculate the effects for most exposed population group and compare the calculated dose with natural and other radiation sources. The assessment of a dose received by an individual in a critical reference group (an adult receiving the highest doses and whose food originates exclusively from locally grown food and fish) shows that the annual dose of such an individual is approximately 0.5 microsievert. The annual dose for NPP is limited to 50 microsieverts per individual (at a distance of 500 m from the reactor or more) from emissions into the environment. Natural radiation and lower effects of general radioactive environment pollution gives a dose of 2300 microsieverts in one year. In 2022, radiation effects of NPP on the population in the vicinity was assessed at less than 0.18 microsievert which is 0.36 % of the said restriction (50 μ Sv). The results of measurements taken are dealt with in detail in the special report, to be prepared by the Jožef Stefan Institute for 2022, together with the Institute for Occupational Safety, MEIS and the Ruđer Bošković Institute.

1.1 LIQUID RADIOACTIVE DISCHARGES

Wastewater may contain fission and activation products. The activity of fission and activation products (excluding tritium H-3, carbon C-14 and alpha particle emitters) amounted to 0.019 percent of the additional annual limit of activity for liquid discharges. The activity of discharged tritium was approximately 54 percent of the prescribed annual limit. Tritium is a hydrogen isotope found in water; because of low radiotoxicity it is less important despite higher activities when compared to other contaminants.

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



DATA ON LIQUID **RADIOACTIVE DISCHARGES** IN 2022

radioactive substances	annual limit	emission activity	percentage of the limit
fission and activation products	100 GBq	0.019 GBq	0.019
Tritium (H-3)	45 TBq	24.3 TBq	54

1.2 RADIOACTIVE AIR EMISSIONS

The annual limit dose of 50 microsieverts for releases into the air and water are checked monthly. The dose calculated for the air at a 500-metre distance from the reactor is calculated as the dose that could have been received by an individual at such distance in one year from external and internal radiation. The least favourable monthly average air rarefaction values and releases near the ground are presumed in the calculation of particular wind directions. The result for 2022 was 0.54 microsievert (1.08 percent of the annual limit). Detailed information is presented in the table below.

DATA ON RADIOACTIVE **RELEASES INTO THE AIR** IN 2022



radioactive substances	total annual limit
fission and activation gases (total)	
lodines (I-131 and others)	
dust particles (Cobalt, Caesium, etc.)	
Tritium (H-3)	
Carbon (C-14)	
	50

Technical regulations were taken into account to limit the radioactive concentrations in the air, e.g., the dose rate within a 500-metre distance from the reactor, to the prescribed value.



dose	percentage of the limit
1.42E-02 μSv	
2.55E-05 µSv	
2.62E-06 µSv	
5.02E-01 µSv	
2.51E-02 μSv	
total 0.54 µSv	1.08



1.3 MEASUREMENTS OF RADIOACTIVE RELEASE AND SAMPLES FROM SURROUNDINGS

The NPP laboratory for radioactive protection regularly checks air and environmental samples by an accredited method, thus having fulfilled conditions set by the standard SIST EN ISO/ IEC 17025 which is checked by a Slovenian accreditation body. The accredited measurements of radioactivity of periodically inspected samples of liquid releases are carried out by the NPP laboratory for radio-chemistry.

1.4 MEASUREMENTS OF THE SAVA RIVER AND GROUNDWATER PARAMETERS

In accordance with the environmental permit concerning emissions to water and the water permit, we measured temperature and the Sava River flow rate, monitored the river level and the underground water levels, and took monthly measurements of biological and chemical oxygen consumption.

The highest permitted temperature of the Sava River (average daily increase of 3 °C) was reached a few times; in general, hydrological situation through the year was favourable. To reduce as much as possible the NPP's effect on the Sava River rising temperature we used cooling towers almost for the whole summer.







Groundwater is regularly inspected by the plant and authorised organisations. The ground water level and temperature in three boreholes and at two locations on the Sava River are measured constantly and weekly in ten boreholes in the Krško-Brežice field. The level of groundwater in the boreholes observed in the vicinity of the watercourse increased for about 2 m when compared to the past year due to the accumulation of the Brežice hydro power plant and is similar to the levels of 2021.



1.5 DATA ON RADIOACTIVE WASTE AND SPENT **NUCLEAR FUEL**

In 2022, 489 new packages of low- and intermediate-level radioactive waste (LILRW) were stored in NPP, with a total volume of 112.3 cubic meters (m³). The goal of NPP for maximum storage volume for LILRW remained the same as in previous year; in practice, it was exceeded. Because the new radioactive waste management building (WMB) was being constructed, it was not possible to categorise waste generated in 2017, 2018 and partly in 2019. After the WMB was completed, the volume for storage waste increased; it has been gradually categorised, in addition to regular categorisation of current waste. The total volume of inventory stored in NPP as on 31 December 2022 was 4,686 LILRW packages, with a total volume of 2,523.5 cubic meters and a total activity of 19.5 TBq.

The spent fuel pool contains 1,432 spent fuel elements from 32 fuel cycles. The overall mass of spent fuel material is 556.1 tonnes.



Since the end of 2008, the standard ISO 14001 on the environmental management has been in place in NPP. Since the certificate was granted, the system has been checked regularly on an annual basis by an external certification organisation. Control assessment was conducted according to the standard ISO 14001:2015. It was established that NPP adequately respects the environmental management system requirements.

A special waste water treatment plant is used for communal waste water. Measurements of pH, temperature, non-soluble substances, chemical and biological use of oxygen, and efficiency of treatment at the outlet are taken by an external organisation, which is in line with the environmental permit requirements. Monitoring results show adequate operation of the treatment plant since all values were in accordance with regulations.



1.6 ENVIRONMENTAL MANAGEMENT AND MUNICIPAL WASTE





Nuclear safety always has a priority at NPP. A high level of nuclear safety of our plant is achieved by independent verifications and critical self-assessment of the results, on-going improvement of human performance and the safety culture, equipment and processes upgrading, learning from own operating experience and international practices, and by comparing with the best facilities in the world.



Due to its specific nature, NPP had its attitude towards the environment implanted in its very initial project (extensive research prior to site selection, strict respect of standards during building). During the start-up and later operation, independent supervision of the effects on the environment was established (radioactive substance release into water and air, measuring of radioactivity in the environment, management of spent nuclear fuel, radioactive and hazardous waste). The attitude towards the environment is part of the business policy within which we give priority to safe and stable operation. The environment treatment practice in NPP is in accordance with the standard ISO 14001-2015, internationally the most widely recognised standard concerning environmental issues. The Protection and Rescue Plan of NPP (NZIR NPP) has been prepared, defining organisation, measures and means to be followed in case of emergency events having potential radioactive effects on the environment.



One of the vital elements to be considered in maintenance and nuclear safety improvements lie in operating experience. On the basis of past experience of the industry, a Safety Upgrade Program (SUP) was carried out as requested by the regulatory body which set out plant's long-term upgrade plan and as a preparation for extending plant's operating life.

Our developmental tasks and work priorities are part of the document entitled Internal Commitments and Goals. They reflect the management board's expectations and established polices as well as our priority areas. In 2022, we paid attention to finding fundamental principles of safe, stable and longterm operation - every day, and to the performance of tasks diligently and safely.

In 2022, the construction of spent fuel dry storage continued and was completed. In January 2023, after successful technical inspection, the operating permit was issued. This will allow for dry run of the cask from the Fuel Handling Building into the Spent Fuel Dry Storage to be started. After such dry run, the first 592 fuel elements will be moved into dry storage which is planned to be completed in the second half of 2023.

The procedure before the Ministry of the Environment and Spatial Planning for assessing effects on the environment was completed and the environmental consent was obtained for 'Extending operating life of NPP from 40 to 60 years, until 2043'. To respect the conditions under the environmental consent which refer to the protection of water, nature and the effects of environmental changes, NPP will change processes and procedures needed for its successful transition to long-term operation.

Activities for the third Periodic Safety Review continued which were confirmed by the Slovenian Nuclear Safety Administration and will be completed by the end of 2023. This is one of the key reviews through which we ensure long-term operation of the plant.

In April 2022, at the location of our customs warehouse, a new centre for theoretical and practical training on health and safety at work was put into service; it will be mostly used by our external providers.



An integral part of the NPP operation are specific risks due to enormous stored energy in the reactor, residual heat and radioactive material in the reactor core. The formally defined management system in NPP lays down fundamental premises and processes for ensuring adequate control of radioactivity and consequently nuclear safety, which in turn ensures adequate operation, maintenance, project changes and control of radioactive releases, etc. We treat nuclear safety in all areas of our work as our first priority. By encouraging and respecting the principles of safety culture at all levels, each NPP's employee, within their individual expertise, responsibility and competence, takes part in ensuring nuclear safety, the safety of employees, population and environment. The principles of our operation are manifested in the efficiency of inter-dependant processes within NPP and which support the overall facility's operation.

2.1 PROCESS AUDITING

Adequacy of NPP's programs and efficiency of processes are assessed by periodic internal audits. We assess the efficiency of activities with a direct impact on structures, systems and components by assessing their effects on safe and reliable plant operation. Audits are regularly planned in accordance with the NPP's QA Plan. They are carried out by qualified staff who have no direct responsibilities in areas being audited. A written report is drawn up for every audit and its results which is sent to the responsible individual of the process. The report includes harmonised corrective measures and deadlines for their completion. NPP's management is informed of the audits' conclusions at the management review.

In 2022, the QA engineers, in cooperation with other organisational units in NPP, conducted ten internal audits in the following areas:

- organisation and administration: assessing compliance of the environmental management system with the ISO 14001 standard and the occupational health and safety management system with the ISO 45001 standard,
- radiological protection, which includes checks on the compliance of accredited laboratories with the ISO 17025 standard,
- chemical and radiochemical systems, which includes checks on the compliance of accredited laboratories with the ISO 17025 standard,
- radioactive waste management,
- operation,
- fire protection,
- maintenance,
- engineering operating permits and documentation control,
- procurement process,
- training,
- planning the measures in emergency event.

The conclusions of internal audits confirm that the systems in place in NPP function in accordance with the requirements of the legislation and standards and comply with the policies and objectives defined. Discrepancies found are recorded in the Corrective Action Program, and organisers and deadlines are set for implementing corrective measures. Implementation of corrective measures are regularly monitored and their efficiency checked.



2.2 OBSERVATION AND COACHING

Observation and coaching are among the most important tools for preventing human errors at work, enabling high quality of work processes and the strengthening of safety culture. Coaching through observation includes observing an individual's behaviour at work and emphasising the desired behaviour, followed by an immediate correction of the behaviour which is not in line with expectations. The basic objective of observation is not to criticise an individual but to uncover discrepancies and opportunities for working process improvements.

efficiency.

In 2022, the monitoring group continued to monitor effectiveness of observation programs. Its objective is to monitor finding of observation analysis through coaching in various organisational units, to identify discrepancies in work processes and suggest improvements. The records of meetings contained their main findings of the analyses of individual activities from the e-form with their suggestions for improving the observation process. The annual report prepared by the monitoring group for monitoring the effectiveness of observations contains the results gathered from 557 observations. The observations included all disciplines and work groups in different plant departments. In 2022, the procedure was revised, significantly optimising the observation process through coaching with the aim of improving work



In 2022, after completing technical review and obtaining operating permit for the reconstructed Operations Support Centre (OSC), we successfully completed the last modification of the SUP's second phase and continued with the construction of Spent Fuel Dry Storage which is the last project of SUP's third phase.

The construction of the dry storage was carried out as planned and was prepared for technical inspection by the end of the year. Now that the operating permit has been obtained, the so-called dry runs and the first phase of transferring spent fuel into dry storage will follow.

Other larger technological improvements include high-pressure turbine and control valves replacement, Mechanical Stress Improvement Process (MSIP), replacement of the heat exchanger of the Component Cooling System (CC) and the heat exchanger of the Turbine Plant Auxiliary Cooling Water System (TC), and the Seismic Instrumentation System upgrade.



in 2023.

From the projects that were completed in 2022 or will continue in 2023, we list below some of the most important ones:

We replaced process AMSAC cabinets, upgraded radiological monitors - first phase, carried out protection against single phasing fault, and replaced secondary equipment in 110-kV and 400-kV fields - first phase. Works on the underground reservoir systems for auxiliary boilers' fuel were completed, the existing ventilation system for cooling the intermediate building (IB) at elevation 107 was replaced, and instrumentation for vibration monitoring of the Chemical and Volume Control System pumps (CS) was installed.

During the 2022 outage, we were preparing for replacing the station service air system (CA) compressor. These activities will be completed

We continued with works for replacing the radio communication system.



3.1 ENSURING SAFETY AND OPERATIONAL RELIABILITY

Among the most important upgrades are projects which ensure safe and reliable operation of NPP, and the projects through which we comply with environmental and other regulatory requirements.

3.1.1 Replacing High-Pressure Turbine and Control Valves

During the 2022 outage, we replaced the highpressure turbine - the last component on the turbine-generator-exciter shaft, which had not been replaced before. In doing so, we gained 5.2 megawatts of the generator power. The replacement involved four main components:

- exchanging turbine rotor and casing,
- mechanical processing of control valve casing and replacement of internal parts and valve actuator,
- replacement of pipelines of turbine auxiliary systems – turbine sealing system, turbine drainage system,
- · replacement of associated instrumentation and management systems.

For the 2024 outage, we are planning additional changes to the high-pressure turbine to achieve operation at the optimal engine operating point and thus gain a few megawatts of generator power.



MSIP was carried out with the help of large pipeline clamps, which compress the weld area under high hydraulic pressure and change the stress in the critical part. The narrowing of the pipelines causes longitudinal movement of the pipelines, which required checking and resetting the entire system of pipeline supports and reactor coolant system components (RCS). The modification during outage was successfully completed.



3.1.2 Mechanical Stress **Improvement Process (MSIP)**

The purpose of modification was to relieve stress corrosion and to remove cracks at the connections of the pipelines to the reactor vessel.

3.1.3 Replacement of Heat Exchanger No. 2 of the Component Cooling System (CC)

The main modification objection was to replace the heat exchanger of the second component cooling system which is important for safety and increases reliability, durability and resistance to the degradation process.



By replacing the heat exchanger number 1 of the Turbine Plant Auxiliary Cooling Water System we increased reliability, durability and resistance to the degradation process. We increased long-term system operating capacity using more corrosionresistant materials and technical solutions.

3.1.4 Replacement of Heat Exchanger No. 1 of the Turbine Plant Auxiliary Cooling Water System (TC)

3.1.5 Seismic Instrumentation System Upgrade

The modification involved replacing seismic system and all associated cable connections. It took into consideration eleven measuring points and the replacement of the central seismic cabinet in the main control room. Six more locations are equipped with seismic instrumentation, namely in the new buildings BB1, BB2, SFDS building and in the buildings IB100 and AB82, now a total of seventeen measurement points. All remote locations for seismic instrumentation are powered from a single power source; all necessary new cable connections have been laid. The modification also included the replacement of the seismic container, the construction of a borehole for the depth sensor, and construction work for the processing and arrangement of the seismic instrumentation infrastructure. In addition, we also replaced the independent accelerometer A0, which is part of the ARSO network.



3.1.6 AMSAC Process **Cabinets Replacement**

The modification includes the replacement of the two AMSAC cabinets located in the main control room due to the discontinuation of the WDPF process platform and the unavailability of spare parts and ended supplier support. All AMSAC system functions, trigger setpoints and time constants have been retained. The new system eliminated single failure since the input modules are also duplicated. In the new system, malfunction alarms are separate for each cabinet, and malfunction indicator lights were added to each cabinet. Safety isolation relays for triggering functions and electrical supply from instrumentation collectors 5 and 6 have been preserved. The replacement of the process cabinets, their testing and system start-up were successful.



3.1.7 Protection Against Single Phase Fault and Replacement of Secondary Equipment in 110-kV and 400-kV Fields — first phase

A single-phase fault detection system on the external 110-kV and 400-kV networks was installed, the control cabinet in the 110-kV field for the station load power supply was replaced, the protection cabinets in both 400-kV transformer fields were replaced as well as transient events recorders on the NPP high-voltage network.







3.1.8 Cooling of Intermediate Building (IB) at Elevation 107

The project involves comprehensive reconstruction of the ventilation-cooling system for the steam supply pipes areas. The system has two devices for fresh air preparation, with the possibility of adiabatic cooling during increased external air temperature, and two air-supply fans, exhaust fans and pusher fans. Pusher fans installed under the ceiling of the main steam relief valve room enable faster air exchange and thus cooling, allowing room temperature to be maintained in the summer below the designed 46 °C. The main distribution channels are thermally insulated.

The system operates continuously with a constant quantity of air blown into the room, while the cooling is adjusted according to the temperature of the rooms and the outside air. The start-up test was successful.



3.2 SAFETY UPGRADE PROGRAM 2013–2022

events.

All changes under SUP have been finalised. In 2022, the building for Spent Fuel Dry Storage was completed.

Spent fuel dry storage is an independent building in the northwest part of the NPP premises. The purpose of the building is to store spent nuclear fuel into multi-purpose canisters (MPC) for dry storage. This system uses passive cooling of spent fuel elements and is therefore inherently safe as it allows for transportation of the containers to another location without the modification of the existing system. This solution is not unique as most plants around the world are in the process of implementing or already use dry storage for spent nuclear fuel.

storage.

With experience following Japan's Fukushima nuclear power plant accident, NPP introduced an extensive Safety Upgrade Program (SUP) and modern standards that include installation of additional safety systems for providing reactor core and spent fuel cooling. These systems provide even higher level of plant's resilience in case of emergency natural and other unlikely events such as extreme earthquakes, floods, extreme external temperatures, extreme winds and aircraft crash. Additional safety systems enable the integrity of the containment and ensure minimum discharges into the environment in the event of unlikely extreme

3.2.1. Construction of Spent **Fuel Dry Storage**

Dry storage was completed and connected to the systems in November. After the technical inspection carried out in January 2023, we obtained the operating permit. Dry tests are underway as well as the first phase of moving spent fuel into dry





Major Maintenance Activities and **Inspection of Pressure Boundaries**

We provide maximum availability of systems, assemblies and devices through regular maintenance during operating inspection and upgrades. Maintenance works focus on preventive actions. Preventive maintenance is carried out at certain time intervals, based on recommendations of suppliers, international practice and own analysis and experience. In certain cases, we use predictive maintenance instead of timebased preventive maintenance which is based on determining the status of a device or assembly, subject to data obtained by measurement, after they have been analytically processed. On the basis of such measurements, we then forecast further functioning of a component and determine its optimum scope and the time for maintenance.

If a component or an assembly nevertheless fails or degrades, corrective measures are carried out which primarily include diagnosis, remedy of faults and root cause analysis.



- - inspection and restoration of anti-corrosion protection:
 - inspection of passive equipment according to aging management programs;

Maintenance activities are carried out according to procedures and instructions prepared in advance. These actions are generally followed by post maintenance tests, demonstrating that the equipment is faultless and the action successful. During corrective actions on equipment which are included in the preventive maintenance program, we conduct a root cause analysis; on the basis of these analyses, the preventive maintenance program is revised accordingly. The goal of maintenance is to minimise failures and maximise availability of equipment that happens with good preventive measures.

The most intensive maintenance activities took place during the plant's outage in October. During each outage, we support refuelling activities which require the opening and closing of reactor, inspections, overhauls and servicing of nuclear fuel handling equipment. In accordance with preventive maintenance programs, we carry out:

- overhauls of valves together with electric, pneumatic and hydraulic drives;
- overhauls of pumps and electric drives;
- overhauls and inspections of ventilation systems; • overhaul and inspection of the turbine, generator and support systems;
- overhaul and inspection of equipment on the Sava River (dam, cleaning machines);
- testing, inspections and interventions on various heat exchangers;
- overhaul of low, medium and high voltage electrical distribution and electrical control equipment:
- calibration of instrumentation in the field and calibration of instrumentation systems for
- control, protection and regulation;
- testing of the reactor protection system;
- inspection and assessment of the condition of buildings and structures:
- various supporting logistics operation
- (scaffolding, transports and lifts).



In addition to standard overhaul works, we also carried out non-standard works, such as:

- replacement of power generator diesel engine assemblies to be used in the event of the loss of external network:
- overhaul of the pump-turbine assembly on the auxiliary feedwater turbine-driven pump;
- overhaul of the main stop valves on steam pipes;
- full inspection of the condenser (visual inspection and eddy-current testing of tubes);
- train A battery replacement;
- replacement of the seal housing and inspection of internal pump parts for residual heat removal;
- change of the automatic start procedure of the auxiliary oil pumps on the turbine generator system;
- update of auxiliary steam system pressure regulation:
- visual inspection of the lower and upper reactor internals:
- ultrasonic inspection of screws on support plates:
- ultrasonic inspection of connections onto the reactor vessel:
- visual inspection of lower instrumentation penetration on the reactor vessel;
- inspection of welds on primary pipelines in accordance with the ten-year in-service inspection: and
- inspection of in-core nuclear instrumentation thimble guides with eddy current testing.

Part of activities are also carried out with the objective to determine the ability of structures and systems for extended operation. These are mostly inspections of large components including the steam generators, reactor and its internals, turbine parts, heat exchangers, cables, pipes, hangers, buildings and structures. Mostly non-destructive examinations are used for this purpose and are very complex due to difficult access to individual sections, often under water, and the inspections are mostly carried out remotely. Having completed the examinations, we established that degradations were smaller than anticipated and corrective measures were not required. At the same time, these inspections additionally confirmed that there are no obstacles for the long-term operation of NPP.





Maintenance efficiency is measured with various indicators and is periodically monitored and checked according to programs. One of the indicators is the number of corrective work-orders in the total number of executed orders. This was 5.5 percent. Works under 19 work orders had to be repeated because first tests were unsuccessful. None of the failures caused any breach of time schedules for operating restrictions set out in the Technical Specifications and no failure caused operating disruption.

The condition of assemblies and devices showed no degradation that would affect continued operation. All assemblies, systems and devices are in a condition which will allow the plant's long-term operation. It is expected that the current maintenance rule program is kept in the same scope, which will prevent any deterioration of the systems', structures' and components' health, and will keep technological equipment in excellent condition.

In 2022, maintenance was carried out on the basis 9448 work orders. Of these, 5913 work orders were carried out online and 3535 during the outage and the plant's shutdown when the systems and equipment were accessible and when maintenance work cannot be carried out while in operation. These maintenance interventions were a great challenge for planning since the equipment and assemblies before the start of maintenance work and all energy sources had to be isolated. Interventions have to be as short as possible to ensure that the unavailability of assemblies and devices due to maintenance are as short as possible, keeping outage critical path short. Each such maintenance activity requires detailed instructions, gualified staff, available spare parts, an optimal schedule and coordinated actions of different departments.



Performance indicators, used to monitor the achievement of targets, efficiency and improvements in a certain area of the plant operation, facilitate the setting of new goals after relevant improvements have been made, the adjustment of priorities and the provision of means to ensure successful operation of the plant. These indicators also allow for comparison with other power plants.



NUMBER OF BRIDE



In 2022, the NPP's total output at the generator outlet was 5,605,507.83 MWh of gross electrical energy, representing 5,310,697.23 MWh of net electrical energy. The annual output was by 1.65 % lower than planned, amounting to 5,400,000.00 MWh, due to exceptionally unfavourable environmental conditions (low Sava River water level and high temperature) and a longer outage period. The availability factor was 89.60 % while the capability factor was 89.06 %.





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PLANT PERFORMANCE



5.2 NUCLEAR FUEL AND SECONDARY **CYCLE CHEMICAL PROCESSES**

In 2022 (during fuel cycle 32 and at the start of fuel cycle 33), the specific activity of the primary coolant and its contamination were below the limits prescribed by law. By the end of 2022, there were no damages to the nuclear fuel or deterioration of its integrity. The nuclear fuel reliability indicator in 2022 met the targets set by NPP and WANO, which confirms the reactor core operational reliability without any nuclear fuel leakage.





FUEL RELIABILITY

INDICATOR

NEK target for 2022: ≤ 6E-5 Ci/m³

In 2022, the release of iron and iron oxides in the secondary cycle was significantly lower than before; deposition in the steam generators was smaller due to the introduction of anti-corrosion Film Forming Amines (FFA), launched before the start of cycle 32. Risks for certain degradation mechanisms in steam generators are therefore lower.

The monitoring of key chemical parameters was effective; cleaning systems which contributed to the effective chemistry program were available.

The chemistry of NPP water media systems continues to ensure long-term plant system availability and importantly contributes to the integrity of nuclear fuel and reactor coolant as well as to keeping doses within limits.

Chemical and radiochemical parameters in the cooling water media systems were maintained in accordance with the technical and chemical specifications. There were no discrepancies or events requiring actions.

By the end of fuel cycle 32, some of the target values of control chemical parameters set by WANO and NPP for the secondary system were exceeded (mainly sodium and sulphate). For this reason, the target performance indicator value set for the secondary chemistry system was not achieved at the end of the year. Aggressive contaminant concentrations that would require actions were not reached. WANO and NPP target values for sodium, chloride and sulphate represent less than 20 percent of the value set for the first action which would require the rectification of such deviation within seven days, or plant operation at a lower power. The main reason for the deteriorated Chemistry Performance Indicator was a minor but chronic leak of the condenser tube bundle. Identifying the location of the leak was difficult and challenging. The corrective action of identifying and plugging was successful and took place during the plant shutdown at the end of cycle 32. The trend of chemical parameters after implementing corrective measures show that in cycle 33, the integrity of the condenser tube bundle has been restored.





We concluded the last contracts for purchasing services and goods for the 2022 outage and intensely participated in giving support to the NPP long-term operation project, the construction of Spent Fuel Dry Storage and the replacement of high-pressure turbine.

We published 133 public tenders on the Public Procurement Portal of which 53 were also published in the Official Journal of the EU. We received offers from 91 different providers.

In the foreign markets, we were faced with challenges concerning American suppliers as they had difficulties with their sub-suppliers due to the increase in raw material prices and delays in material deliveries. International transport, especially shipping service, has significantly deteriorated, delays in deliveries were long and prices extremely high. Shippers and logistics organisers failed to meet delivery deadlines and often changed transport routes, which caused delays.





5.3 PROCUREMENT OF SERVICES AND EQUIPMENT

In 2022, the market was still unstable, which reflected in price increase of goods and services, and consequently in the purchase orders concluded. For the first time we were faced with requests for price increase under already concluded contracts.

The NPP outage service providers were faced with difficulties finding suitable staff for outage works, as there were not enough qualified people in the market to work in NPP during the outage.



6.0 International Cooperation

NPP has joined numerous international professional organisations, which enables our employees to remain up-to-date with and to co-create the best practices, exchange knowledge and experience and transfer them into the domestic work environment. Our active role in these organisations and international peer reviews of the plant significantly contribute to improving work processes and achieving good safety and operational results.



6.1 OUR COOPERATION WITH INTERNATIONAL **ORGANISATIONS IN 2022**

plants.

For years now NPP has been an active participant in WANO. Our experts have taken part in 61 of their missions worldwide. One of our representatives actively participated in WANO international expert operating peer review in the plant Trillo in Spain.

Through the technical assistance program our plant has hosted 37 expert missions in the past years which cover various areas of the plant's activities.

With constant improvement of knowledge, work processes and practices, the NPP's representatives carried three benchmarking reviews at plants abroad: Angra 1 in Brazil, Borselle in the Netherlands, and Almaraz in Spain.



Two NPP's employees temporarily worked at WANO in the Paris Centre. One worker was responsible for the review of operating experiences while the second one offered expert support to

The NPP's representatives take part in professional training organised by various expert organisations. Good results of our plant are becoming a model practice to other nuclear plant operators and an example of good practices in various fields of work. To date, there have been 43 expert benchmarking visits in NPP. In 2022, we received virtually experts from English plant Sizewell B. One of our representatives was invited by IAEA to participate as a speaker at IAEA SALTO workshop taking place for several days at the Japanese plant Mihama.

Representatives from WANO participated at the testing of our readiness for emergency event during the April drill. In this way, our readiness for information exchange in emergency situation (WANO emergency full scale drill) was verified.

Through WANO, NPP informed the industry of eight operating experiences in our plant.

Together with NUPIC, representatives of NPP took part in five audits of safety equipment suppliers in the USA and Europe.

NPP also takes an active part in some of the important areas of the EPRI activities, including:

- equipment maintenance of nuclear facilities (NMAC):
- engineering support (EP);
- non-destructive testing and research (NDE);
- exchange of experience in applying accident analysis programs (MAAP);
- exchange of experience concerning erosion/ corrosion issues (CHUG);
- chemical water media (water chemistry).

Our plant participated in the PWROG and FROG annual conferences, organised separately for nuclear facilities from Europe.

We actively participated at the conferences of the Nuclear Society of Slovenia and in the forum of the Croatian Nuclear Society.



6.2 MEMBERSHIPS AND **PARTICIPATIONS IN INTERNATIONAL ORGANISATIONS**

At NPP, we are aware of the importance to participate in international organisations and in the international monitoring of our operation. Only this way can we attain international comparable operation and safety results. For this purpose, NPP is a member of many organisations listed below:

WANO

All nuclear power plants in the world are members of World Association of Nuclear Operators (WANO). NPP has been a member of this organisation since its establishment in 1989. Its aim is to promote the highest standards of operational safety, 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 nonprofit and independent organisation for research in the area of 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 electricity.

PWROG

PWROG (Pressurized Water Reactor Owners Group) is an association of all 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, increased power of the plant, 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 Framatome company. With the aim of exchanging 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).

FORATOM

FORATOM – European Atomic Forum is a trading association for nuclear energy in Brussels. NPP cooperates with the expert team for optimising and improving support change of nuclear suppliers. The group develops methodology and prepares a report on the use of high-quality industrial equipment and spare parts in nuclear plants.

EC - JRC

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

ENISS

As a member of ENISS group (European Nuclear Industry Safety Standards), Krško NPP took part in the preparation of the EU nuclear industry position in drafting amendments to legislation in this industry. The work group acts within FORATOM, an EU nuclear industry organisation.

NUPIC

NUPIC (Nuclear Procurement Issues Committee) is a committee of American and other nuclear facilities for joint evaluation of safety class equipment suppliers. The aim of this organisation is to improve the process of locating the suppliers of high-quality standards.

IAEA

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 in planning and using nuclear technology for various peaceful purposes. This includes production of electrical energy and transfer of technology and knowledge in this area. IAEA develops safety standards that support the realisation of high level of safety in using nuclear energy and on protecting the public against ionising radiation. The organisation operates on the basis of various programs such as control of nuclear material, nuclear technology application, nuclear energy, nuclear safety and technical cooperation. It organises various missions such as OSART (Operational Safety Review Team) and SALTO (Safety Aspects of Long-Term Operation). IAEA missions involve visiting plants, to assess their operating safety and application of IAEA standards in practice after conducting a detailed review.

NRC

NRC (Nuclear Regulatory Commission) is an USA independent nuclear regulatory commission to ensure 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), NPP is a member in several programs which give access to information and literature in various areas.





Through systematic staff training and the system of staff knowledge management we ensure a high level of professionalism and enthusiasm. The comprehensive staff development is one of the fundamental values which are the basis for our activities which in return assist us in permanently achieving NPP vision and mission.

The fundamental values which are part of our work processes and relationships include safety culture, excellence in relationships and integral personal development. At the same time, these values are the reference line of our actions and the basis of our vision and mission.



7.1 COMPREHENSIVE STAFF DEVELOPMENT

Prerequisites for long-term safe and stable operation of the plant are provided through longterm planning of human resource processes, timely staff recruitment and the provision of systematic development for all employees. We are aware that professional, well qualified and competent individuals are a prerequisite for work processes to be performed safely, efficiently and at high quality level, as well as for constant improvements in all work areas. The established professional training programs are intended to provide and reinforce professional knowledge and skills which ensure successful completion of all work tasks at a high professional level and in accordance with international standards. Reinforcement of knowledge and transfer of skills from highly experienced staff onto younger generations are provided through on-the-job training programs at the work place and under mentorship. In 2022, more than 20,000 man-courses were held, or 274 courses, with an average of 73 participants. The total number of training hours, excluding on-the-job training, amounted to more than 91,000 hours. Of these, 55,500 hours were for NEK employees and 36,000 hours for external contractors. The average amount of training hours per training year per employee in NPP was higher than 93 hours. At the same time, steps have been taken to bring up and develop the next generation for key positions in the plant. In the area of human resources, special attention has always been paid to monitoring staff enthusiasm and management processes, such as annual development interviews.



Staff with expertise and skill, while possessing suitable values, are of strategic significance and one of the key factors of nuclear safety, long-term stability, competitiveness and success.

In the area of human resources, the 2022 was another intensive period of gradual replacement of generations as 22 employees were replaced by new staff. In accordance with expectations, employee retirement process continued for those who had met retirement conditions. The annual staff turnover was 2.8 percent, expressing a stable human resources structure.

At the end of the year, there were 648 employees in NPP of which 46.5 percent with high professional and university education. The employee structure included 10 doctors of science and 14 masters of science. The share of female staff was 13.6 percent. At the end of the year, 14 students were receiving scholarship for the Bologna first- or second-degree university study program.





7.2 TRAINING OF OPERATING STAFF

In NPP, we arrange initial licensed staff training and provide continuous licensed staff training and professional training of equipment operators. Initial licensed staff training for reactor operators was conducted in accordance with national legislative requirements and practices in the nuclear industry. The 97-week training course is structured in four phases of different forms of training, aimed at preparing candidates for independent work in the NPP main control room. In February 2022, after 20-week training of 9 participants, we completed Phase 1 – Theoretical Basis for initial training of staff with licences. Of these, eight of them continued a 32-week training of Phase 2 – Plant Systems and Operation, carried out from March to end of November. Six candidates went on to train for a reactor operator license and the training will be completed after 45 weeks, in January 2024.

DISTRIBUTION OF EMPLOYEES ACCORDING TO THE LEVEL OF EDUCATION





PHASE Theoretical basics 20 week 17 we Training on simulato 19 weeks

INITIAL LICENSED

STAFF TRAINING



Examinations before expert commission, nominated by URSJV, were successfully completed by eight candidates: Three obtained their first Senior Reactor Operator licence, eight candidates successfully renewed their Senior Reactor Operator licences, six renewed their Reactor Operator licences and five Shift Engineer licence.

The on-going professional training for equipment operators was conducted in parallel with the training for licensed staff, in four weekly training segments. The program focused on technical expertise and hands-on training by using system operating procedures in the technological building or with the full-scope simulator. Other training was aimed at refreshing and upgrading existing knowledge and skills which equipment operators need in their dayto-day work.

There was no four-day hands-on training for refuelling handling equipment at Westinghouse facility in the United States of America. The objective of this training is to prepare participants for safe and quality performance of this important refuelling activity during the outage. Training took place at NPP using internal experts in this field. The course will be repeated in 2023.

Prior to undertaking major activities in the plant, the operational staff underwent training on the fullscope simulator.

On-going professional training of licensed staff was conducted in accordance with the approved outline program and the plant's internal procedures. The training was conducted through lectures and various scenarios on the simulator, during four weekly segments, attended by all operation crews and other licensed personnel.

7.3 STAFF TRAINING FOR **MAINTENANCE AND OTHER SUPPORT FUNCTIONS**

The professional training of technical personnel included courses to acquire the legally required general and specialist knowledge needed for performing maintenance, engineering and other supporting functions.

Courses for technical staff aimed at acquiring legally required knowledge and refresher courses for general and professional knowledge and skills were conducted for maintenance and other support functions.

Within the framework of initial training for technical personnel, a course in the fundamentals of nuclear power plant technology (OTJE) is usually carried out. In 2022, one NPP employee attended this course.

Training of maintenance personnel programs continued in the field of specialist and legally required knowledge. The training required was prepared on the basis of matrices of required qualifications. Some courses were conducted in the Maintenance Personnel Training Centre and in NPP technological units, partly in cooperation with external institutions. The training was conducted by engaging mentors for practical training from individual maintenance departments in addition to our own training staff.

According to the policy of continuous training of maintenance staff, we completed one section of the training program in five repetitive sessions in the area of general and legally required subjects. The maintenance staff was updated with new aspects of plant processes, and on in-house and industry operating experience.





Legally required training includes: occupational health and safety, fire protection, hazardous substances, etc. General training includes: General Employee Training (GET) program, first-line supervisor training, etc.

We continued with established programs of initial training and refresher courses related to occupational health and safety, fire protection, hazardous substances, Protection and Rescue Plan (NZIR), movement within the power generating facilities, etc.

Radiation protection initial and refresher training was conducted according to legal requirements.

Extensive two NZIR drills were carried out, both supported by the use of the full-scope simulator.

In addition to the above-mentioned training, many courses were carried out for other departments within the power plant. They were intended to update the staff on new legislation, on the implementation of innovations in individual processes, as well as general courses on computer literacy and foreign languages.



7.4 OTHER LEGALLY **PRESCRIBED AND GENERAL TRAINING**

EVENTS AFTER END OF BUSINESS YEAR

8.0 Events After End of Business Year

There were no business events after the balance sheet date until the time when this Annual Report was drawn up which would significantly affect the company's financial statements for 2022.

On 13.01.2023, the Ministry of the Environment and Spatial Planning issued the environmental consent for extended plant operation from 40 to 60 years. The consent became final on 21.02.2023.













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INDEPENDENT AUDITOR'S REPORT

www.bdo.si

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, 2022 and the income statement, statement of other comprehensive income, statement of changes in equity 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 Krisko 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 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 or ether athinia responsibilities in accountance until the second statements and the IESBA Code). 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

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 material 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 Management is responsible to the preparation of the resolution of the second se

BDD Revictija d.o. d., slovenska družba z omejeno odgovornovtjo, je članica BDD international Limited, britanske družbe "limited by guarantee" in je del medivandee BDD merče medi seboj neodvisnih družb članic. Civralno sodžie z v južistimi, vila. TJ zilati VJ, do soveni kapisti: 9.736,64 (UR, matična BL: 39136H), D Iz. za DDV: 5/46(37026.

BDO

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.

confirmation of audited annual report

Auditor's Responsibilities for the Audit of 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 mistatement, when it exists. Mistatements 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 about 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 organization to cease to continue as a going concern.

Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether 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

We communicate with the Supervisory Board 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 17, 2023

Supervisory Board is responsible for overseeing the Company's financial reporting process and for

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional

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

> Uroš Kavčník Certified auditor

(Signature on original Slovene Independent auditor's report)





Statement of Responsibility of Management Board

The company Management Board is responsible for the preparation of the NEK Annual Report and Financial Statements in a manner which provide for the interested public a true and fair presentation of the financial position and business results of NEK in 2022.

The Management Board declares that:

- · the financial statements have been prepared under the assumption that NEK will continue operations 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 accordance with the principles of due care and due diligence;
- · the financial statements with explanatory notes have been prepared in accordance with 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 with 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 2022.

Krško, 15 March 2023

Stanislav Rožman, President of the Management Board

Saša Medaković, Member of the Management Board



Financial statements of NPP and their notes have been prepared in accordance with the Intergovernmental Treaty and the Articles of Association, The Companies Act (ZGD-1) and Slovenian Accounting Standards (SRS) for areas not otherwise regulated by the Intergovernmental Treaty or the Articles of Association.

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





4.1 BALANCE SHEET

ASSETS in EUR	31.12.2022	31.12.2021
A. LONG-TERM ASSETS	445,872,439	434,124,817
Tangible fixed assets	445,867,409	434,118,581
Land and buildings	85,657,431	64,331,673
Land	2,340,248	1,927,370
Buildings	83,317,183	62,404,303
Production equipment and machinery	273,822,140	277,180,447
Other equipment and machinery	6,651,547	6,085,496
Tangible fixed assets being obtained	79,736,291	86,520,965
Tangible fixed assets being installed or produced	79,664,400	86,416,687
Advances for acquiring tangible fixed assets	71,891	104,278
Long-term financial investments	5,030	6,236
Long-term loans	5,030	6,236
Long-term loans to others	5,030	6,236
B. CURRENT ASSETS	114,576,435	122,029,988
Inventories	68,158,620	56,498,815
Material	68,079,770	56,498,626
Advance payments for inventories	78,850	189
Short-term financial investments	14,002,163	22,009,765
Short-term loans	14,002,163	22,009,765
Short-term loans to others	14,002,163	22,009,765
Short-term operating receivables	15,811,036	17,564,827
Short-term operating receivables from buyers	9,985,960	16,860,560
Short-term operating receivables from others	5,825,076	704,267
Cash	16,604,616	25,956,581
C. SHORT-TERM DEFERRED EXPENSES AND ACCRUED REVENUE	1,254,072	1,134,031
TOTAL ASSETS	561,702,946	557,288,836

LIABILITIES IN EUR	
A. Capital	
Called-up capital	
Share capital	
Capital reserves	
Revenue reserves	
Legal reserves	
Statutory reserves	
Other reserves from profit	
Reserves from fair value re-evaluation	
Net profit or loss carried over	
Retained net profit or loss	
B. Provisions and long-term accrued costs and deferred re	ev
Provisions for jubilee benefits and severance pay	
Long-term accrued costs and deferred revenue	
C. Long-term operating liabilities	
Long-term operating liabilities	
Long-term financial liabilities to banks	
Long-term operating liabilities	
Other long-term operating liabilities	
Č. Short-term operating liabilities	
Short-term financial liabilities	
Long-term financial liabilities to banks	
Short-term operating liabilities	
Short-term operating liabilities to suppliers	
Other short-term operating liabilities	
D. Short-term accrued costs and deferred revenue	
TOTAL LIABILITIES TO SOURCES	

	31.12.2022	31.12.2021
	480,953,540	481,585,536
	353,544,826	353,544,826
	353,544,826	353,544,826
	41,850,000	41,850,000
	89,294,326	89,294,326
	35,354,483	35,354,483
	53,321,477	53,321,477
	618,366	618,366
	68,860	700,856
	-3,804,472	-3,804,472
	0	0
е	13,108,124	12,392,445
	12,866,528	12,117,663
	241,596	274,782
	33,640,871	37,826,798
	33,480,000	37,665,000
	33,480,000	37,665,000
	160,871	161,798
	160,871	161,798
	32,782,561	18,764,834
	4,185,000	4,185,000
	4,185,000	4,185,000
	28,597,561	14,579,834
	21,531,993	8,452,528
	7,065,568	6,127,306
	1,217,850	6,719,223
	561,702,946	557,288,836

rt of the Financial Statements and should be read together.

in EUR

4.3 STATEMENT FOR OTHER COMPREHENSIVE INCOME

4.2	INCOME
	STATEMEN

in EUR	2022	2021
Operating revenue	188,676,088	179,467,425
Net revenue from sales	184,109,210	176,734,714
Other operating revenue	4,566,878	2,732,711
Operating expenses	187,678,229	178,724,298
Costs of material and services	78,961,731	78,795,647
Costs of spent material	39,336,225	38,115,473
Costs of services	39,625,506	40,680,174
Costs of labour	47,787,559	43,324,263
Costs for salaries	33,327,941	29,528,907
Costs of social insurance, of which:	9,046,029	8,081,464
Pension and disability insurance	5,006,095	4,394,034
Costs for supplementary pension insurance	1,441,701	1,340,673
Other costs for labour	5,413,589	5,713,892
Write-offs	49,071,483	44,647,551
Depreciation	44,589,000	41,382,941
Revalued operating expenses for fixed assets	1,534,199	5,650
Revalued operating expenses for working capital	2,948,284	3,258,960
Other operating expenses	11,857,456	11,956,837
OPERATING PROFIT OR LOSS FROM OPERATIONS	997,859	743,127

Financial revenue	83,951	30,220
Financial revenue from loans given	18,740	1,614
Financial revenue from loans given to others	18,740	1,614
Financial revenue from operating receivables	65,211	28,606
Financial revenue from operating receivables from others	65,211	28,606
Financial expenses	954,340	647,562
Financial expenses for financial liabilities	436,216	494,846
Financial expenses for loans from banks	397,460	418,500
Financial expenses for other financial liabilities	38,756	76,346
Financial expenses for operating liabilities	518,124	152,716
Financial expenses for liabilities to suppliers and commercial instruments	446,958	119,643
Financial expenses for other operating liabilities	71,166	33,073
OPERATING PROFIT OR LOSS FROM FINANCING	-870,389	-617,342
OPERATING PROFIT OR LOSS FOR THE PERIOD	127,470	125,785
Corporate income tax	127,470	125,785
NET OPERATING PROFIT OR LOSS FOR THE PERIOD	0	0

Note: Notes to Financial Statements are part of the Financial Statements and should be read together.

NET OPERATING PROFIT OR LOSS FOR THE PER	RIOD
Other elements of comprehensive income	
TOTAL COMPREHENSIVE INCOME FOR THE ACC	
Note: Notes to Financial Statements are part of the Finar	icial Statements
4.4 CASH FLOW STATEMENT	

in EUR	2022	2021
A. Cash flows from operating activities		
Cash receipts from operating activities	212,932,981	200,534,776
Receipts from sales of products and services	207,885,941	197,455,820
Other receipts from operating activities	5,047,040	3,078,956
Cash disbursements from operating activities	170,876,128	131,662,815
Expenses for material and services	101,992,764	68,282,429
Expenses for salaries and employee profit participation	37,110,858	35,004,787
Expenses for all types of duties	30,256,820	26,985,699
Other operating expenses	1,515,686	1,389,900
POSITIVE OR NEGATIVE CASH FLOW STATEMENT FROM OPERATING ACTIVITIES	42,056,853	68,871,961
B. CASH FLOWS FROM INVESTING ACTIVITIES		
Cash receipts from investing activities	24,007,590	26,000,048
Receipts from interests obtained and participation in profits of others from investments	7,590	48
Receipts from divestment of financial investments	24,000,000	26,000,000
Disbursements from investing activities	70,823,399	98,178,633
Expenses for acquiring tangible fixed assets	54,777,326	75,106,162
Expenses for acquiring financial investments	16,046,073	23,072,471
POSITIVE OR NEGATIVE CASH FLOW STATEMENT FROM OPERATING ACTIVITIES	-46,815,809	-72,178,585
C. Cash flow from financing activities		
Cash receipts from financing activities	0	5,500,000
Receipts from called-up capital	0	5,500,000
Receipts from increasing financial liabilities	0	0
Cash disbursements from financing activities	4,593,009	418,211
Expenses for interests from financial activities	408,009	418,211
Expenses for financial liabilities	4,185,000	0
POSITIVE OR NEGATIVE CASH FLOW STATEMENT FROM FINANCING ACTIVITIES	-4,593,009	5,081,789
CLOSING BALANCE OF CASH	16,604,616	25,956,581
Cash flow statement for the period	-9,351,965	1,775,165
Opening balance of cash	25,956,581	24,181,416

Note: Notes to Financial Statements are part of the Financial Statements and should be read together.

	2022	2021
	0	0
	-631,996	226,817
IOD	-631,996	226,817

al Statements and should be read together.

FINANCIAL REPORT



4.5 EQUITY CHANGES STATEMENT

in EUR	Nominal capital	Capital reserves	Legal reserves	Statutory reserves	Other reserves from profit	from fair value re-evaluation	Net profit or loss carried over	Retained net profit or loss	TOTAL
Closing balance 31.12.2021	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 01.01.2022	353,544,826	41,850,000	35,354,483	53,321,477	618,366	700,856	-3,804,472	0	481,585,536
Changes to 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 31.12.2022	353,544,826	41,850,000	35,354,483	53,321,477	618,366	68,860	-3,804,472	0	480,953,540
Closing balance 31.12.2020	353,544,826	36,350,000	35,354,483	53,321,477	618,366	474,039	-3,804,472	0	475,858,719
Opening balance 01.01.2021	353,544,826	36,350,000	35,354,483	53,321,477	618,366	474,039	-3,804,472	0	475,858,719
Changes to equity - transactions with owners	-	5,500,000	-	-	-	-	-	-	5,500,000
Additional paid-up capital	-	5,500,000	-	-	-	-	-	-	5,500,000
Total comprehensive income for the accounting period						226,817			226,817
Other elements of comprehensive income						226,817			226,817
Closing balance 31.12.2021	353,544,826	41,850,000	35,354,483	53,321,477	618,366	700,856	-3,804,472	0	481,585,536

Note: Notes to Financial Statements are part of the Financial Statements and should be read together.



5.0 General Accounting **Policies**

5.1 LEGAL BASIS

The Intergovernmental Treaty (IT) 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 shareholders and the company, as well as the legal status of the company in its legal transactions, shall be regulated in accordance with IT. The ZGD-1 and the SRS apply unless IT provides otherwise for mutual relationships and criteria. In certain areas the SRS allows for options and these areas are governed by the internal procedure Accounting in NPP (hereinafter: Rules). The Financial Statements for 2022 were drawn up on the basis of these Rules.

NPP engages only in one energy activity which is base-load power generation as a commercial activity. In accordance with the IA, we have an obligation to supply electrical energy exclusively to the two shareholders, half each. The shareholders then sell it in the market.

The key activity is electrical energy generation and it amounts to more than 99 % of all revenue. We engage in supplementary activities to a small extent, including food operations, letting out our own holiday and business apartments, mostly 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 took into consideration that NPP is a large company according to the ZGD-1; in accordance with SRS, large companies disclose all important items set out in the Rules. For better information, we disclose also certain less important items.

Balance sheet items in the Financial Statements are presented and explained in EUR (excluding cents) for the business year which is the same as a calendar year. Items not applicable to NPP 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 for the previous business year.

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 conversion 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.



The Income Statement which also contains elements of comprehensive income is presented in 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 applying the direct method, the form of such presentation is successive-tiered. The basis for drawing up the Cash Flow Statement are 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.

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**

5.4 BUSINESS AND GEOGRAPHICAL SEGMENTS

NPP does not have any business and geographical segments defined.

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



5.5 REVALUATION OF ASSETS

Revaluation of assets is a change to the initially presented value of assets. The revaluation model is not used for any group of assets and therefore we do not carry out asset reinforcement. The impairment of assets can arise with respect to all assets, regardless of the selected model of showing assets, that is if bookkeeping value of assets exceeds their replacement value.

In accordance with company's directions, we carry out impairment for spare parts inventory if they were not used in the last six years.

5.6 CHANGES TO ACCOUNTING POLICIES

The accounting policies were not changed in 2022.



5.7 **RISK** MANAGEMENT

We have established a model for identifying and monitoring potential risks that could affect our business. We pay special attention to market risks and financial risks which mostly encompass price growth risk of raw materials and other materials, liquidity risk, capital inadequacy risk, foreign currency risk, interest risk, credit risk and investment risk.

We are exposed to *marketing risk* due to market fluctuations of electrical energy prices. We monitor information on the market price of electrical energy; currently, market prices are significantly higher than the price of NPP electrical energy.

Price growth risk for raw materials and other materials mostly refers to higher prices of raw materials in the world markets. The risk is minimised by contractual provisions through which we try to limit the growth of contractual value for purchased materials and services. The risk is also reduced by taking into account forecasts when planning costs and expenditure.

Liquidity risk is risk that at a certain point in time a company will not have adequate financial assets for paying its obligations and will need additional sources of financing. When searching for bridging financial sources, the existing long-term borrowing may cause risks since banks take into account financial leverage and capital index when making credit assessment. We regularly monitor indicator values and found we still have room for potential additional bridging borrowings if needed.

Capital inadequacy risks is risk for inadequate coverage of long-term assets. Considering the current balance sheet data, we have all long-term assets and stock covered with long-term sources and we are not exposed to this risk.

Credit risk refers to unsettled receivables for electrical energy supplied. In accordance with the AA, shareholders must settle their obligations in 15 days from invoice issue date. The supply of electrical energy to a shareholder can be terminated if their obligations are not paid in further 8 days or if adequate insurances for paying obligations are not given. In such a case, we sell electrical energy on the market ourselves.

Investment risks refer mostly to risks of nonrecovery of deposits. The risk is minimised by dispersing deposits between best banks, taking into account optimal financial structure and the criteria that a cumulative deposit amount cannot exceed 0.8 % of the bank's total balance sheet and the deposit at a particular bank cannot exceed 5 % of NPP's assets.

Currency risk arises from the volatility of exchange rates; we are exposed to it mostly due to liabilities in foreign currencies. We strive to keep most of our obligations in euros. We monitor our exposure to obligations in foreign currency on a monthly basis.

We are currently not exposed to *interest risk* connected to borrowing because long-term borrowing is subject to fixed interest rate.



6.0 **Accounting Policies** by Individual Economic **Categories**

6.1.2 Depreciation

Net-book value of a tangible fixed asset is reduced by depreciation.

Depreciation for all tangible fixed assets, except for nuclear reactor with the cooling and auxiliary systems (hereinafter: nuclear reactor), is calculated by the straight-line depreciation method, taking into account the useful life of assets. Land is not depreciated.

Depreciation of tangible fixed assets starts on the first day of the month after they have become available for use.

Annual depreciation cost is set out in the AA at the amount required for new investments and the repayment of loan principles for the assets, as defined in the long-term investment plan. The purpose of depreciation in accordance with

6.1 BALANCE SHEET

6.1.1 Tangible Fixed Assets

Tangible fixed assets are initially recognised by their purchase value consisting of purchase price and all costs which can be directly attributed to using a particular tangible fixed asset (for example transport costs, installation, etc.). In accordance with the IT and AA, the purchase value of a tangible fixed asset does not include borrowing costs for acquiring the tangible fixed assets, until the asset is ready for use. In accordance with the AA, depreciation costs are calculated only in the value of authorised investments and repayments of long-term loans and are not increased by interest costs for these loans.

Costs incurred later, which allow for extending the operating period, increased safety or operating reliability or for reducing operating costs compared to their initial assessment, increase the purchasing value. Replacement parts are treated as spare parts for maintenance and are recognised as costs of spent material.

Valuation of tangible fixed assets is carried out according to the purchase value model.



		Depreciation rate in %
	Production buildings	2.1
gs	Simulator building	4.4
	Other buildings	from 3.0 to 4.75
BU	Holiday apartments buildings	from 3.0 to 3.9
	Other buildings	12.5
	Nuclear reactor	2.6
	Radiological waste equipment	3.1
	Radiological protection equipment	3.1
lent	Technical protection 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

the AA is not the replacement of tangible fixed assets at the end of their useful life as this arises from the SRS since the operating period of the plant is limited. The purpose of depreciation is technological upgrade of the plant during its operating period in accordance with the highest world standards and industry practice recommendations. Depreciation is methodologically calculated by taking into account valid depreciation rate for all tangible fixed assets except for nuclear reactor. The depreciation value of the nuclear reactor is determined as a difference between the annually planned depreciation cost and calculated depreciation cost of other tangible fixed assets. Consequently, the rate and amount of depreciation of the nuclear reactor change in individual years. For other tangible fixed assets, the rates remain unchanged when compared to the previous year.

Depreciation rates are shown for different groups of tangible fixed assets.

TABLE: DEPRECIATION RATES FOR DIFFERENT **GROUPS OF TANGIBLE FIXED ASSETS**



6.1.3 Impairment of Tangible **Fixed Assets**

The company checks the bookkeeping value of tangible fixed assets once per year if signs of impairment are detected. If such signs are detected, the replacement value of a tangible fixed asset is assessed and impairment shown in the Income Statement.

6.1.4 Long-term Financial Investments

Long-term financial investments are initially recognised by their purchase value which is equal to the amount paid, expressed in cash or cash equivalent.

Long-term financial investments in a form of longterm housing loans are recognised according to the repayment value and they change to retain their value; however, they are reduced by the unpaid amount and the amount arising from short-term financial investments which are due for payment within one year or sooner.

Long-term financial investments are minimum portions of long-term assets and refer to long-term financial receivables from employees for housing loans given in the past.

If there is direct evidence that a financial investment was impaired for a long period, the impairment is recognised in the Income Statement as a financial expense.

6.1.5 Inventories and Cost for Spent Material

Due to the nature of production, we have no unfinished production or half-finished or finished stock among inventories. Our inventory consists only of nuclear fuel, spare parts and other material.

Inventory of material is initially evaluated at their purchase price, consisting of purchase price, import duties and direct procurement costs. Nuclear fuel inventory is initially evaluated at its purchase price of a particular cycle.

Due to importance and different method of evaluation, the nuclear fuel inventory is shown separately from spare parts and other material. Materials intended for investments are shown under tangible fixed assets.

The use of nuclear fuel is valued according to the actual price method, the use of other type of material, including spare parts and other material (technological fuel, chemicals, overhead material, cleaning material, office material, small inventory and other) are valued by the moving average price method.

For spare parts inventory which were not used in the past six years (non-current spare parts), value correction is made at 100 % value.

The accounting principle for creating value correction for non-current spare parts allows bookkeeping value to express real stock value as close as possible.

All stock is shown as short-term assets in accordance with regulations. Inventory of spare parts and nuclear fuel have a long tying period -614 days.

Inventory of material is not encumbered by guarantees.

6.1.6 Operating Receivables

Receivables of all types are initially recognised in the amount shown in documents, based on assumption that they will be settled. Receivables from buyers or recipients of sold and supplied electrical energy are secured by their own bills of exchange.

If our receivables are not settled within the regular or even additional period, bills of exchange are submitted for redemption. NPP may also terminate the supply of electrical energy to the shareholder if their obligations are not paid or does not provide adequate insurance for paying their obligations. In such a case we sell electrical energy on the market. If the proceeds of electrical energy so sold do not cover all costs or expenses, the shareholder remains obligated to pay the difference.

6.1.8 Cash

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

Cash is recognised in the amount shown in documents.

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

6.1.7 Short-term Financial Investments

Short-term financial investments are short-term company assets which give return and increase financial revenue in the period shorter than one year. These include mostly deposits at business banks. When these are first recognised, they are valued at the original value, on the date of payment (settlement). After initial recognition, they are valued at the repayment value according to the valid interest rate method. If there is direct evidence that loss would arise from loans or financial investments until their maturity for payment due to impairment, the difference between the book and current value of expected future cash flow, discounted at effective interest rate for the asset, is recognised as financial expense.

6.1.9 Short-term Deferred Expenses and Accrued Revenue

Items for deferred costs 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.



6.1.10 Capital

The value of total company capital is obtained by deducting all debts and company's provisions from the value of all the assets. It is defined as the sum invested by the shareholders and as sums arising from operation and which belong to the shareholders.

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 Provisions and Long-term Accrued **Costs and Deferred Revenue**

Provisions are long-term liabilities which are likely in terms of time and future expenses to be paid.

Provisions for severance and jubilee payments are recognised as liability at the current value for future claims. Costs of the period are shown in the Income Statement while changes to financial forecasts of severance payments upon retirement, shown as a shortfall or an excess, affect the equity.

Long-term accrued costs and deferred revenue include costs calculated in advance or expenses calculated in advance and deferred revenue which is anticipated to occur in a period longer than one year as expenses or revenue. These include longterm costs or expenses calculated in advance and deferred revenue from the state aid received for purchasing tangible fixed assets which are reduced in accordance with their depreciation.

6.1.12 Long-term Financial and **Operating Liabilities**

Long-term liabilities show financial and operating liabilities which are initially recognised in the sum shown in related documents.

Long-term liabilities, expressed in foreign currency, are revalued due to changes in the domestic currency purchase power. Their consequential increase or reduction increase current financial expenses or revenue.

6.1.13 Short-term Financial and Operating Liabilities

Short-term liabilities show financial and operating liabilities which are initially recognised in the sum shown in related documents showing debt.

Short-term liabilities, expressed in foreign currency, are revaluated to retain their real value. Their consequential increase or reduction are current financial expenses or revenue.

Short-term liabilities show also those elements of long-term liabilities which are due for payment within the year after the balance sheet date.

6.1.14 Short-term Deferred Expenses and Accrued Revenue

Accrued costs and deferred revenue are liabilities which are anticipated to occur within a year, they are likely to occur and their amounts can be reliably assessed.

Accrued costs and deferred revenue include mostly short-term costs calculated in advance.

6.1.15 Conditional Assets and Liabilities

A conditional asset is a possible asset arising from past events and whose existence is confirmed by the occurrence or non-occurrence of one or more uncertain future events. A conditional liability is a possible liability or a current undertaking arising from past events but is not recognised as it is unlikely the settlement of the undertaking will require the outflow of factors enabling economic growth. Items for conditional assets do not have direct effect on the size or structure of assets and liabilities to their sources (balance sheet) and revenue and expenses (income statement) but they are source of information for operation and possible future company's liabilities.

revenue.

Explanation 1 to SRS 15.5. provides that other operating revenue is to show revenue associated with business effects such as subsidies, grants, benefits, compensations, premia and other similar revenue. These include state aid obtained from the State or a local community. These sometimes occur in a form of donation or subsidy. State aid is recognised as a revenue if there is an acceptable assurance that the company will fulfil the conditions for it and then also receive it. Financial revenue is incurred in relation to financial

investments and receivables. It consists of calculated interests and positive currency rate differences. Revalued financial revenue occur upon divestment of financial investments if the sold value exceeds the bookkeeping value.

6.2 INCOME **STATEMENT**

6.2.1 Revenue

Revenue includes operating revenue and financial

Operating revenue consists of the value of sold business effects in the accounting period when it is realistic to expect that they will be paid for goods and services. Sales price per one unit (available power and active energy) of produced electrical energy is composed of permanent and variable part. It is defined in accordance with the annual Business Plan, consisting of the plan of costs and production, and the annual investment plan, to the effect that the price covers all company's costs and expenses. Before drawing up final annual accounting statements, a budget is generally prepared so that revenue covers all company's expenses. On the basis of a shareholders' general meeting resolution, positive difference is distributed to reserves or for covering loss carried forward. Other operating revenue includes revenue from the supplemental activities, any revenue from sale of unused property and revenue from using provisions.



6.2.2 Expenses

Expenses include operating and financial expenses.

Operating expenses include costs of sold quantities and revalued operating expenses for tangible fixed assets and working capital which arise mostly as a result of lower sale price of these assets than their book value and as a result of impairment of tangible fixed assets, stock, operating receivables and differed costs and accrued revenue.

Financial expenses are expenses from financing and investing. The first refer to costs of calculated interests, negative currency exchange rate difference and revalued financial expenses. Financial expenses from investments arise from their impairment. This includes any shortfall from sold value when compared to the book value.

NPP does not have stock of finished or unfinished production. For this reason, all expenses arising in the accounting period are treated as operating expenses and affect the result in the period in which they arise.

Such costs are categorised by their type and functional groups. Based on their purpose or function, they are categorised into purchase value of sold quantities and to costs of general activities. Costs of general activities consist of costs for material and services for the following organisational units: Management Board, Finance and General Administration.

6.2.3 Corporate Income Tax

NPP must pay corporate income tax. In accordance with the Corporate Income Tax Act (ZDDPO-2), NPP is affiliated with the company GEN, a resident in the Republic of Slovenia, and HEP, a non-resident in the Republic of Slovenia, and in accordance with the Act we should increase revenue in the calculation of the corporate income tax for the differences between the comparable market prices and the transfer prices. The price of electrical energy supplied exclusively to the shareholders is administered and defined by the IT and the AA and, therefore, we do not determine comparable market prices and do not increase revenue when calculating corporate income tax.



TANGIBLE FIXED ASSETS AND DEPRECIATION

Tangible fixed assets are fully owned by the company. They are situated mostly at the seat of the company, those outside it are mostly buildings and equipment in holiday facilities and business apartments.

others.

Tangible fixed assets are not encumbered by guarantees. Financial obligations for obtaining tangible fixed assets on the basis of concluded purchase agreements were in the sum of EUR 67.058.220.

Value changes of tangible fixed assets are shown in the table illustrating value changes of fixed assets.

6.3 NOTES TO FINANCIAL **STATEMENTS**

6.3.1 Notes to the **Balance Sheet**

The book value of production devices and machinery decreased in 2022 since depreciation value was higher than activated investments. The book value of other devices and equipment, as well as buildings, increased because the values of activated investments were higher than the value correction made. The value of land increased because of the purchase of new land. In 2022 we activated and reactivated major modifications: the replacement of the high-pressure turbine, safety upgrade – phase 2, SUP phase 3, vibration monitoring of major rotating components, upgrade of seismic instrumentation system and replacement of heat exchanger of the turbine plant auxiliary cooling water system. Ongoing investments are tangible fixed assets under construction and production and mostly refer to systems upgrading to ensure safe and stable operation of the plant. Ongoing investments are those that are not yet activated such as the spent fuel dry storage, replacement of heat exchanger of the component cooling system, new technical security systems and



TABLE: Value Changes of Tangible Fixed Assets

		Production equipment and machinery		tion equipment and machinery	Produ	ction equipment and machinery		
in EUR	Land	Buildings	Nuclear reactor	Radioactive waste equipment	Radiological protection equipment	Technical protection system	Other equipment	Current investments
PURCHASE VALUE								
Balance as at 01.01.2022	1,927,370	325,156,488	1,332,264,895	46,149,373	96,271,515	16,801,041	51,950,823	86,416,688
Purchasing								56,368,878
Activations	412,878	28,466,354	31,886,466			471,682	1,885,122	-63,122,501
Reductions		-5,641	-2,072,204				-258,963	
Bookkeeping differences in different periods			4,392					1,335
Balance as at 31.12.2022	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
VALUE CORRECTION								
Balance as at 01.01.2022	-	262,752,184	1,057,847,783	46,149,373	96,271,515	14,037,706	45,865,326	-
Reductions		-5,641	-2,072,204				-254,570	
Depreciation	-	7,553,475	34,878,829	-		842,017	1,314,679	-
Balance as at 31.12.2022		270,300,018	1,090,654,408	46,149,373	96,271,515	14,879,723	46,925,435	
RESIDUAL VALUE								
Balance as at 01.01.2022	1,927,370	62,404,304	274,417,112	0	0	2,763,335	6,085,496	86,416,687
Balance as at 31.12.2022	2,340,248	83,317,183	271,429,141	0	0	2,392,999	6,651,547	79,664,400

τοται	Ongoing investments with short-term advances	Short-term advance payments
1,957,042,471	86,520,966	104,278
56,336,49	56,336,492	-32,387
(-63,122,501	
-2,336,808		
5,727	1,335	
2,011,047,88	79,736,291	71,891
1,522,923,887		
-2,332,418		
44,589,000		
1,565,180,472	-	-
434,118,58	86,520,965	104,278
445,867,409	79,736,291	71,891



LONG-TERM FINANCIAL INVESTMENTS

Long-term financial investments are a minimum portion in long-term assets. They refer to longterm financial receivables from employees for housing loans given for individual constructions and purchase of apartments under the Croatian housing law and amount to EUR 5,030 (2021: EUR 6,236).

TABLE:

LONG-TERM FINANCIAL INVESTMENTS

in EUR	Housing loans to employees	TOTAL 2022	TOTAL 2021
Balance as at 01.01.	6,236	6,236	14,212
Transfer from short-term financial investments	9,765	9,765	11,921
Repayments	-8,808	-8,808	-10,132
Divestiture	-	0	0
Impairment of financial investments	-	0	0
Transfer to short-term financial investments	-2,163	-2,163	-9,765
Balance as at 31.12.	5,030	5,030	6,236

The investment book values are the same as their purchase values. Long-term financial investments are not encumbered.

INVENTORIES AND COST FOR SPENT MATERIAL

TABLE: VALUE CHANGES OF INVENTORY MATERIAL

in EUR	Nuclear fuel	Spare parts	Other material	TOTAL 2022	TOTAL 2021
Balance as at 01.01.	24,595,756	27,448,131	4,454,739	56,498,626	85,225,345
New purchases	41,617,352	6,739,519	4,749,703	53,106,574	12,095,978
Consumption	-28,969,109	-5,265,826	-4,345,723	-38,580,658	-37,565,939
Write-offs	-	-7,339	-	-7,339	-41,186
Value correction	-	-2,937,433	-	-2,937,433	-3,215,572
Balance as at 31.12. without advance payments	37,243,999	25,977,052	4,858,719	68,079,770	56,498,626
Advance payments for inventories	-	78,850	-	78,850	189
Balance as at 31.12. with advance payments	37,243,999	26,055,902	4,858,719	68,158,620	56,498,815

Net market value of inventory for spare parts and other material is difficult to assess due to their specific nature. There are only two similar plants operating around the world which are installing similar components and spare parts required for maintenance. Therefore, there is practically no demand in the market for such inventory and the costs for their sale would be greater than the profit. Usable value of spare parts inventory, in particular those categorised as a safety class, have great value for ensuring plant's safe operation.

Operating receivables include receivables from shareholders who are also recipients of electrical energy and other short-term receivables. Operating receivables are not encumbered as securities for liabilities.

TABLE: **OPERATING RECEIVABLES**

in EUR	31.12.2022	31.12.2021
Short-term operating receivables to affiliated companies	9,617,628	16,822,277
GEN	4,885,887	9,244,675
HEP	4,731,741	7,577,602
Short-term operating receivables from buyers	368,332	38,283
Short-term operating receivables from others	5,825,076	704,267
TOTAL	15,811,036	17,564,827

Short-term operating receivables to affiliated companies in the amount of EUR 9,617,628 refer to receivables for supplied electrical energy to GEN (receivables from GEN include value added tax in the sum of EUR 154.146) and to HEP as of December 2022, and are reduced for credit notes under the AA. Payments fall due for payment in 15 days after invoice issue date.

The value of inventory, together with advance payments was in the amount of EUR 68,158,620 on 31.12.2022. Inventory of material refers to the nuclear fuel inventory, spare parts and other material. There was no excess or shortfall during inventory taking.

OPERATING RECEIVABLES



Short-term operating receivables from buyers in the amount of EUR 368,332 refer to receivables from supplementary activities (EUR 106,825) and receivables for external investments (EUR 261,507).

Short-term operating receivables from others in the amount of EUR 5,825,076 refer mostly to claims for value added tax in the sum of EUR 4,234,385; the difference in the sum of EUR 1,590,691 refers to receivables from employees, government institutions for refund for gross salary compensation and contributions (disability and similar) and other receivables. Receivables were not yet due for payment on 31.12.2022.

Receivables are not encumbered. They are secured for the amount of EUR 9,617,628. Receivables in the amount of EUR 6,193,408 are receivables from other buyers, VAT and other receivables not secured and are not subject to great risk for their recovery.

SHORT-TERM FINANCIAL INVESTMENTS

Short-term financial investments show deposits in banks and long-term housing loans given which are not due for payment in the next business year.

TABLE: SHORT-TERM FINANCIAL INVESTMENTS BALANCE

in EUR	31.12.2022	31.12.2021
Deposits in banks	14,000,000	22,000,000
Long-term loans given, due for payment in 2023	2,163	9,765
Total short-term financial investments	14,002,163	22,009,765

Short-term financial investments amount to FUR 14,002,163 (2021: EUR 22,009,765). Most refer to deposits in business banks. Deposits partly refer to obligations not yet due as of 31.12.2022, and partly to intended investments made with deferment. Short-term financial investments are not encumbered. Interest rates were negative in the first half of 2022, but moved into positive areas towards the end of the year.

CASH

Cash shows balance on current and foreign currency accounts in the amount of EUR 16,604,616 (2021: EUR 25,956,581). Surplus assets are of a short-term nature, as the assets are primarily intended to cover expenses for current operation. No cash at hand was kept on 31.12.2022.

SHORT-TERM DEFERBED EXPENSES AND ACCRUED REVENUE

Short-term deferred costs and accrued revenue in the amount of EUR 1,254,072 (2021: EUR 1,134,031) refer to short-term deferred costs for insurance premium (EUR 978,189) and for membership costs for 2023 (EUR 275,883).

CAPITAL

Capital amounts to EUR 480,953,540 and is fully divided between the two shareholders in equal sum.

Called-up capital amounts to EUR 353,544,826 and it originates from the IT and is registered with the court.

Capital reserves amount to EUR 41,850,000 and were created due to subsequent contributions by shareholders, intended for covering expenses related to investments for safety upgrades.

Profit reserves amount to EUR 89,294,326. Legal and statutory reserves were created in accordance with the IT and legal reserves in accordance with the ZGD-1 in the amount prescribed which is 10 % of called-up capital. Statutory reserves are created in accordance with the AA which stipulates that all possible profits arising from discrepancy between actual and planned revenue and expenses or from later tax or accounting changes be included. Other reserves from profit amount to EUR 618,366 and were created by distributing part of the profit from 2014 and 2016. Net profit of the business year can be used for covering loss brought forward if so decided by the general meeting. These reserves are intended for covering any loss arising from the same reasons.

2017.

RESERVES AND LONG-TERM ACCRUED COSTS AND DEFERBED REVENUE

parameters.

Fair value reserves, which can be positive or negative, are shown in the actuarial calculation due to changes to financial items and experiences in calculating reserves for severance pay to employees upon their retirement. These reserves are positive and they amount to EUR 68,860.

Loss carried forward is in the amount of EUR 3.804.472 of which EUR 3.155.782 is for 2017 and refers to creating additional reserves for jubilee awards and severance pay, the difference of EUR 648,690 is for recording the unused annual leave for

Reserves and long-term accrued costs and deferred revenue amount to EUR 13.108.124 as at 31.12.2022 (2021: EUR 12,392,445). The majority of the amount is for reserves for jubilee awards and severance pay, amounting to EUR 12,866,528 (2021: EUR 12,117,663). The amount is determined by the actuarial calculation of an authorised actuary (3sigma d.o.o.). The calculation took into account the following assumed parameters: discount rate (3.14 % annually, corresponding to the discount rate which is the same as the rate of return for 10-year bonds with AA credit rate in Eurozone), determined operating period of the plant (until 30.06.2043), long-term salary growth at 4 % annually, employee fluctuation at 3 % and employee mortality based on last available mortality rate for population in Slovenia. The table shows sensitivity analysis for important actuarial assumed



TABLE: SENSITIVITY ANALYSIS FOR IMPORTANT ACTUARY ASSUMED PARAMETERS (IN EUR)

Parameter	Discrepancy	Description	TOTAL	Severance pay	Jubilee awards	Severance pay under Article 108
Central scenario	0.00%	balance	12,866,528	7,118,785	2,485,230	3,262,514
	0.50.%	balance	13,588,508	7,391,880	2,592,637	3,603,990
Discount	-0,50 %	(difference)	721,979	273,096	107,407	341,477
interest rate		balance	12,202,636	6,863,234	2,384,589	2,954,813
	0,50 %	(difference)	-663,892	-255,550	-100,641	-307,701
	0.50.%	balance	12,204,997	6,864,170	2,384,960	2,955,866
	-0,50 %	(difference)	-661,532	-254,614	-100,270	-306,647
Salary growth		balance	13,578,549	7,388,123	2,591,157	3,599,270
	0,50 %	(difference)	712,021	269,338	105,927	336,756
Duration (DBO)			11.10	7.70	8.60	20.50

Long-term provisions for jubilee and severance pay upon retirement were created at the current value of future payments required for paying the obligations arising from employee service in the current and past period. We do not expect significant discrepancies from the assumed parameters applied and we assess that the risk is low.

Long-term deferred costs and accrued revenue in the amount of EUR 241,596 refer to deferred revenue. These refer to assets received (in 2000 and 2001) from the Republic of Slovenia budget for upgrading the plant and are reduced according to the calculated depreciation of these assets (2021: EUR 274,782).

TABLE: VALUE CHANGES TO PROVISIONS AND LONG-TERM ACCRUED COSTS AND DEFERRED REVENUE

in EUR	Provisions for jubilee awards	Provisions for severance pay	Long-term accrued costs and deferred revenue	TOTAL 2022	TOTAL 2021
Balance as at 01.01.	2,660,692	9,456,971	274,782	12,392,445	16,417,417
Transfer to short-term ACDR				0	-3,897,485
Provisions withdrawals	-182,023	-178,845	-33,186	-394,054	-534,363
Creating provisions as expenditure	6,562	471,175		477,737	633,693
Creating ACDR as costs of outage				0	0
Creating provisions as fair value reserves		631,996		631,996	-226,817
Balance as at 31.12.	2,485,231	10,381,297	241,596	13,108,124	12,392,445

LONG-TERM LIABILITIES

TABLE: VALUE CHANGES IN THE LONG-TERM FINANCIAL LIABILITIES

	Long-term financial liabilities	Long-term financial liabilities
in EUR	2022	2021
Balance as at 01.01.	37,665,000	41,850,000
Reductions	-4,185,000	-4,185,000
Balance as at 31.12.	33,480,000	37,665,000

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



Long-term financial liabilities amount to EUR 33,480,000. They refer to the long-term loan taken for financing investments into SUP, taken out in November 2019. The liabilities will be gradually reduced over 10 years after 2022, when the repayment of principal at the annual rate of EUR 4,185,000 starts and will be paid off in 2031. The principal carries fixed interest rate; the interest rate is not disclosed as it is a business secret.

Long-term financial liabilities with maturity longer than 5 years amount to EUR 16,740,000.

The reduction refers to the transfer of liabilities to short-term financial liabilities which are due within one year.

TABLE: VALUE CHANGES IN THE LONG-TERM **OPERATING LIABILITIES**

	Long-term operating liabilities	Long-term operating liabilities
in EUR	2022	2021
Balance as at 01.01.	161,798	173,320
Transfer of short-term liabilities	7,777	7,749
Repayments	-7,081	-11,494
Transfer to short-term investments	-1,623	-7,777
Balance as at 31.12.	160,871	161,798

Long-term operating liabilities amount to EUR 160,871. They refer to liabilities towards the Croatian housing fund for apartments sold in accordance with legal regulations. There is no maturity date longer than five years.

We do not have long-term financial liabilities with maturity longer than 5 years.

SHORT-TERM LIABILITIES

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

Short-term financial liabilities amount to EUR 4,185,000. They relate to two principal instalments under long-term loan due for payment in 2023.

TABLE: BALANCE OF SHORT-TERM OPERATING LIABILITIES

in EUR	31.12.2022	31.12.2021
Short-term operating liabilities to suppliers	21,531,993	8,452,528
Domestic suppliers	7,928,655	4,726,588
Foreign suppliers	12,914,139	3,190,338
For goods and services not yet invoiced	689,199	535,602
Short-term operating liabilities to others	7,065,568	6,127,306
Employees	4,622,473	3,243,018
State and other institutions	2,070,052	2,648,767
Other short-term liabilities	373,043	235,521
TOTAL	28,597,561	14,579,834

Short-term operating liabilities to suppliers amount to EUR 21,531,993 and refer to liabilities not yet due for payment for the supply of fixed and operating assets and for non-invoiced supply of goods and services.

Short-term operating liabilities to others refer to

liabilities to employees for salaries and other labour

costs for December 2022 (EUR 4,622,473), liabilities

to the state and other institutions (EUR 2,070,052),

interests (EUR 94,937) and other smaller liabilities

liabilities for interests for loans and negative

in the amount of EUR 278,106.

CONDITIONAL ASSETS AND LIABILITIES

liabilities.

REVENUE

Revenue is divided into operating and financial revenue.

SHORT-TERM ACCRUED COSTS AND DEFERRED REVENUE

Accrued costs and deferred revenue as at 31.12.2022 amount to EUR 1.217.850 (2021: EUR 6,719,223). The amount of EUR 923,416 (2021: EUR 879,321) refers to deferred expenses for unused annual leave in 2022, and the amount of EUR 294,434 (2021: EUR 298,598) refers to other deferred labour costs for rewards to the board and executive directors, together with contributions. In 2021, we also showed the accrued costs of outage services among deferred accruals (EUR 5,541,304).

We do not have any conditional assets and

6.3.2 Notes to the Income Statement

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



TABLE: **OPERATING REVENUE**

in EUR	2022	2021
Net revenue from sales	184,109,210	176,734,714
Revenue from electrical energy supplied to GEN	92,054,605	88,367,357
Revenue from electrical energy supplied to HEP	92,054,605	88,367,357
Other operating revenue	4,566,878	2,732,711
TOTAL	188,676,088	179,467,425

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

TABLE: OTHER OPERATING REVENUE

in EUR	2022	2021
Operating revenue from supplementary activities	1,675,129	1,608,963
Revenue generated by providing meals to workers	1,398,390	1,404,291
Revenue from accommodation rental for holiday and business purposes	276,739	204,672
Other operating revenue	2,891,749	1,123,748
Refunded sick leave payments	901,151	623,787
Refunded compensation to employees posted abroad	320,375	307,300
Cancellation of reservations received from RS	33,186	33,185
Revenue from sale of waste material	82,066	18,815
Revaluated operating revenue from HESS	1,534,199	0
Other operating revenue	20,772	140,661
TOTAL	4,566,878	2,732,711

In 2022, revenue was in the amount of EUR 1,534,199 from HESS in accordance with the Conditions of the Concession for Exploitation of the Energy Potential of the Lower Sava River Act (ZPKEPS-1).

Financial revenue from operating receivables and liabilities arose from currency differences on the basis of revaluation and amount to EUR 65,211 (2021: EUR 28,606).

EXPENSES

NPP does not have inventory of finished or unfinished production. All expenses are treated as operating expenses and affect the result for the accounting period.

Operating expenses amount to EUR 187,678,229 and include all costs for operations which are categorised by their type and functional groups.

TABLE: COSTS BY THEIR TYPE AND FUNCTIONAL GROUPS

in EUR	2022	2021
COSTS BY THEIR TYPE	187,678,229	178,724,298
Costs for material and services	78,961,731	78,795,647
Costs of spent material	39,336,225	38,115,473
Costs for energy	29,386,614	30,528,985
Costs for spare parts	5,467,465	2,978,105
Costs for other material	4,482,146	4,608,383
Costs of services	39,625,506	40,680,174
Costs for fixed assets maintenance	15,649,470	18,339,562
Costs for transactions and insurance premium	2,819,697	2,442,960
Costs for services for product manufacture	15,552,194	14,775,763
Costs for other services	5,604,145	5,121,889
Costs for labour	47,787,559	43,324,263
Costs for salaries	33,327,941	29,528,907
Costs for social insurance	7,604,328	6,740,791
Costs for supplementary pension insurance	1,441,701	1,340,673
Other costs for labour	5,413,589	5,713,892
Write-offs	49,071,483	44,647,551
Depreciation	44,589,000	41,382,941
Revalued operating expenses	4,482,483	3,264,610
Other operating expenses	11,857,456	11,956,837
COSTS BY FUNCTIONAL GROUPS	187,678,229	178,724,298
Production costs for sold quantities	179,960,232	171,214,985
Costs of general activity	7,717,997	7,509,313



Costs for spent material, in the amount of EUR 39,336,225, are mostly costs for nuclear fuel, in the sum of EUR 28,969,109. Costs for services, in the amount of EUR 39,625,506, are mostly maintenance costs (EUR 15,649,470) and costs for services for product production (EUR 15,552,194). Costs for labour, in the mount of EUR 47,787,559, are costs for salaries, and for contributions in the amount of EUR 42,373,970. Other costs of labour, in the amount of EUR 5,413,589, refer to special award at the end of completed fuel cycle and 531 uninterrupted operating days, transport costs to and from work, food during work, holiday money, additionally created long-term reserves for jubilee awards and severance pay, and other costs of labour.

The structure and number of employees by education is shown in the business report. On 31.12.2022, there were 648 employees in NPP (at the end of 2021, there were 644). The average number of employees in 2022 was 623.

The majority of write-offs are for depreciation, calculated in accordance with the AA and it amounts to EUR 44,589,000. Revaluated operating expenses refer mainly to the value adjustment for obsolete spare parts amounting to EUR 2,937,433, created according to our accounting policy. In the business year we also showed revalued operating expenses in the amount of EUR 1.534.199 for write-off of fixed assets received from HESS.

Other operating expenses refer to duties and compensations for restricted use of area within the nuclear facility and for the use of building land (EUR 7,007,484), for water refund for use of technological water (EUR 4,297,745), and others (EUR 552,227).

Financial expenses, in the amount of EUR 954,340, refer to financial expenses for interest revaluation for receivables and debt, and for interests on provisions for jubilee awards and severance pay.

CORPORATE INCOMF TAX

The company is a taxable entity under the ZDDPO-2 and the Rules on corporate income tax returns.

TABLE: CALCULATION OF NPP CORPORATE INCOME TAX

in EUR	2022	2021
Revenue	188,760,040	179,497,646
Revenue increase to tax recognised level	0	0
Revenue decrease to tax recognised level	0	0
Tax recognised revenue	188,760,040	179,497,646
Expenses	188,632,569	179,371,861
Expenses increase to tax recognised level	180,433	250,589
Expenses decrease to tax recognised level	-1,866,195	-1,914,064
Tax recognised expenses	186,946,807	177,708,386
Tax base 1	1,813,233	1,789,260
Tax relief	1,142,337	1,127,234
Tax base 2	670,896	662,026
Tax rate	19 %	19 %
Corporate income tax	127,470	125,785

On the basis of the ZDDPO-2R, from 01.01.2020, when determining tax base, it is no longer possible to recognise the reduced base on the total investment value. Tax base - as a difference between tax recognised expenses and revenue amount to EUR 670,896, on which 19 % corporate income tax applies and amounts to EUR 127,470. We could seek tax relief (including those for past years) in the amount of EUR 134,827,651; however, it can be claimed only up to 63 % of the tax base. Unused tax relief can be claimed in the next five years.

NET PROFIT

According to the ZGD-1, net profit is a legally defined category and is a sum of net profit or loss, profit or loss brought forward and any increase due to reduced reserves from profit or reductions for creating reserves from profits. Shareholders' general meeting decides on the use of net profit, upon the recommendation of the management board and supervisory board of NPP. In 2022, NPP shows net loss from 2017 in the amount of EUR 3,804,472 while net profit is not shown.

NET OPERATING PROFIT OR LOSS FOR THE PERIOD

Operating profit or loss for 2022 amounts to EUR 127,470; after taxation, net operating profit or loss for the period is zero. The item 'other elements of comprehensive income' for 2022 shows actual deficit in the amount of EUR 631,996.



6.3.3 Notes to Cash **Flow Statement**

The Cash Flow Statement shows events concerning solvency. This Statement is drawn up according to the direct method. Individual types of cash flow are compared to realised cash flow in the Cash Flow Statement for 2022, with those realised in 2021. Revenue in 2022 was in the amount of EUR 236,940,571 and expenses in the amount of EUR 246,292,536. Revenue was higher than expenses by EUR 9,351,965.

TABLE: **RECAPITULATION OF REVENUE** AND EXPENSES BY TYPES OF CASH FLOW

in EUR	2022	2021
Cash flows from operating activities	42,056,853	68,871,961
Cash receipts from operating activities	212,932,981	200,534,776
Cash disbursements from operating activities	170,876,128	131,662,815
Cash flows from investing activities	-46,815,809	-72,178,585
Cash receipts from investing activities	24,007,590	26,000,048
Cash disbursements from investing activities	70,823,399	98,178,633
Cash flow from financing activities	-4,593,009	5,081,789
Cash receipts from financing activities	0	5,500,000
Cash disbursements from financing activities	4,593,009	418,211
Total/Net cash flow	-9,351,965	1,775,165

6.3.4 Notes to the **Equity Changes Statement**

Value changes of different capital items are shown in the Equity Changes Statement, point 4.5. The amount of called-up capital as set in the IT is EUR 353,544,826, which is also the sum registered in the court register. Capital in 2022 was reduced by EUR 631,996 due to the deficit in reserves following revaluation at fair value. These are shown on the basis of actuary calculation and are related to the changes of financial assumed values for provisions for severance pay upon retirement.

TABLE: **RECEIPT BY INDIVIDUAL GROUPS OF PEOPLE IN 2022**

in EUR	Number of receipts	Receipts from employment relationship	Other receipts	TOTAL
Board members	2	453,806	-	453,806
Employees under individual contracts	21	3,353,183	-	3,353,183
Members of NPP Supervisory Board	6	-	85,307	85,307
TOTAL	29	3,806,989	85,307	3,892,296

Receipts include salaries, holiday money and other receipts from the employment relationship. Other receipts include payments for performing a function in the supervisory board and payments for attending meetings.

6.4 ADDITIONAL **EXPLANATIONS**

6.4.1 Information on **Groups of People**

Information on groups of people shows receipts, separately for the following groups: management board, employees under individual contracts, supervisory board of NPP.

No receivables from the management board members, employees under individual contracts or the supervisory board members for loans, advances or sureties are shown.



6.4.2 Information on Affiliated Companies

All transactions with affiliated companies are shown in the Report on relationships with affiliated companies for 2022.

TABLE: INFORMATION ON AFFILIATED COMPANIES

in EUR	Revenue	Expenses	Receivables	Liabilities
GEN energija, d. o. o.	92,054,605	154,182	4,885,887	-
HEP, d. d.	92,054,605	152,678	4,731,741	-
GEN-I, d. o. o.	-	2,100	-	-
HEP ELEKTRA, d. o. o.	-	18,020	-	-
HEP ENERGIJA, d. o. o.	-	32,150	-	7,515
TOTAL	184,109,210	359,130	9,617,628	7,515

In addition to data in the table, we also show transactions with HESS for liabilities in the sum of EUR 340,277. On 31.12.2022 we had current liabilities in the amount of EUR 16,663 and current receivables in the amount of EUR 261,507 representing our share in financing the Hydro Power Plant Brežice impact.

In the business year 2022, there were no legal transactions or omission of transactions or other acts which we committed or omitted on the basis of interests or initiatives of the companies GEN or HEP and which would constitute a depreciation within the meaning of Article 545 of the ZGD-1.

6.4.3 Other Disclosures

Other disclosures refer to costs for auditing services which are shown separately by types of services. In 2022, the costs for auditing the Annual Report were EUR 18,850; other costs were in the sum of EUR 1,040. We did not engage any tax advisers or other non-auditing service providers.



We assess there were no business events after the balance sheet date until the Annual Report was drawn up which would significantly affect the company's financial statements for 2022.



Events After Balance Sheet Date

List of Acronyms

AB	Auxiliary Building
AMSAC	Anticipated Transient Without Scram Mitigation Signal Actuation Circuitry
ARSO	Slovenian Environment Agency
BB	Bunkered Building
BR	Boron Recycle System
CA	Compressed Air System
CC	Component Cooling
CDP	Core Damage Probability
CDU	Work Efficiency Centre
CHUG	Checworks Users Group
CS	Chemical and Volume Control System
DBO	Defined Benefit Obligation
VAT	Value Added Tax
AA	Articles of Association
ENISS	European Nuclear Industry Safety Standards
EPRI	Electrical Power Research Institute
EU	European Union
FFA	Film Forming Amine
FORATOM	European Atomic Forum
FROG	Framatome Owners Group
GEN	GEN energija, d. o. o.
GH	Waste Processing Gas System
HEBR	Hidroelektrarna Brežice (Brežice Hydroelectric Power Plant)
HEP	Hrvatska elektroprivreda, d. d., Zagreb
HESS	Hidroelektrarne na spodnji Savi (Hydroelectric power plants on the lower course of the Sava River)
HUPX	Hungarian Power Exchange
IAEA	International Atomic Energy Agency
IB	Intermediate Building
IESBA	International Ethics Standards Board for Accountants
IJS	Institute "Jožef Stefan"
ISEG	Independent Safety Engineering Group

ISI	In-Service Inspection
ISO	International Organisation for Standardization
I&C	Instrumentation and Control
JRC	Joint Research Centre
MAAP	Modular Accident Analysis Program User Group
IT	Intergovernmental Treaty
MSIP	Mechanical Stress Improvement Process
IAS	International Auditing Standards
NDE	Non-Destructive Examination
NEK/NPP	Nuklearna elektrarna Krško (Krško Nuclear Power
NMAC	Nuclear Maintenance Application Centre
NRC	Nuclear Regulatory Commission
NZIR	Protection and Rescue Plan
SB	Supervisory Board
LILRW	Low- and Intermediate-Level Radioactive Waste
NUPIC	Nuclear Procurement Issues Committee
OSC	Operations Support Centre
OSART	Operational Safety and Review Team
OTJE	Fundamentals of Nuclear Plant Technology
PB	Pre-treatment Building
PARMS	Post Accident Radiation Monitoring Systems
ACDR	Accrued Costs and Deferred Revenue
PSE	Plant Support Engineering
PIS	Processing Information System
PWR	Pressurized Water Reactor
PSR	Periodic Safety Review
PWROG	Pressurized Water Reactor Owners Group
QA	Quality Assurance
RW	Radiological waste
RCS	Reactor Coolant System
FS	Financial statements
RO	Reactor Operator
RP	Radiological Protection
SALTO	Safety Aspects of Long-term Operation
SFDS	Spent Fuel Dry Storage
SRS	Slovenian Accounting Standards
TC	Turbine Plant Auxiliary Cooling Water System
UCF	Unit Capability Factor
URSJV	Slovenian Nuclear Safety Administration
WANO	World Association of Nuclear Operators
WDPF	Westinghouse Distributed Processing Family
WG	Working Group
WMB	Waste Manipulation Building
WP	Liquid Waste Processing System
ZDDPO-2	Corporate Income Tax Act
ZGD-1	Companies Act
ZPKEPS-1	Conditions of the Concession for Exploitation of th

Plant)

he Energy Potential of the Lower Sava River Act





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