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ANNUAL REPORT



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# MISSION

- Operation, maintenance and decommissioning of nuclear facilities
- Management of spent nuclear fuel and performance of fresh and spent nuclear fuel transports
- Management of radioactive waste and performance of radioactive waste transports

## AUTHORIZATION OF THE MINISTRY OF ECONOMY OF THE SLOVAK REPUBLIC TO PERFORM ACTIVITIES

Based on the provisions of Act No. 350/2011, Coll., amending the Atomic Act No. 541/2004, Coll., the Ministry of Economy of the Slovak Republic has authorized JAVYS, joint stock company (JAVYS, a.s.), to perform activities related to the storage of radioactive waste and spent nuclear fuel at the national level for all operators of nuclear facilities.

As the only company, JAVYS, a.s., has professionally competent staff, relevant technical means, established facilities for the performance of these activities available and the company holds authorizations issued by supervisory bodies.

Jadrová a vyrad'ovacia spoločnosť, a.s., is a joint stock company with the 100 % ownership of the state that exercises its shareholder rights by means of the Ministry of Economy of the Slovak Republic.

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# SPEECH BY THE CHAIRMAN OF THE BOARD OF DIRECTORS AND CEO

## *Ladies and Gentlemen.*

The decommissioning of nuclear facilities is the final phase of each nuclear facilities's life cycle and those activities are performed by Jadrová a vyradovacia spoločnosť, joint stock company (JAVYS, a.s.), in Slovakia. Thanks to long-standing professional experience, the company has become a significant partner for both national and foreign companies to which it offers professionalism, quality and a guaranteed professional approach.

I am glad that, thanks to those stable pillars as well, we have achieved multiple significant milestones within projects implemented and very good economic results in 2017. JAVYS, a.s., has achieved the profit after tax on the level of €7,701,168 for 2017 which, in our conditions, represents the plan fulfilment to 110.85 % and means a successful continuation to perform stabilized management and achieve gradual increase in the value of our company.

In 2017, our company was included in the public administration sector for the first time during the whole year, based on the Decision of the Statistical Authority of July 2017, which meant that our company had been proceeding in compliance with new rules, resulting to it from that transfer, for the whole year.

In addition to good economic results, I am also pleased with very good results in the nuclear safety area on which our company places extraordinary emphasis. The year 2017 was statistically the best year in that area for the past five-year period and we registered neither any operational event reportable to regulatory bodies, nor any repeated operational events during that year.

We are succeeding undoubtedly in achieving the mentioned positives thanks to high professionalism, effective

company management system, preventive measures as well, but also by means of the active staff engagement in the system.

The main JAVYS, a.s., main projects include the decommissioning of the two oldest nuclear power plants in Slovakia – A1 NPP and V1 NPP.

In the A1 NPP decommissioning area, JAVYS, a.s., performed successfully all the planned A1 NPP decommissioning activities in 2017, in compliance with the schedule of works specified for the year 2017, by means of the continuous radioactivity inventory reduction through the decontamination and dismantling of technological equipment, systems and civil structures of the A1 NPP system of buildings and by means of continuous, smooth processing of radioactive waste resulting from the A1 NPP decommissioning and of historical radioactive waste resulting from its operation. The determined plan of activities for the year 2017 in the A1 NPP decommissioning area, including the management of radioactive waste resulting from the A1 NPP decommissioning, was fulfilled to the full extent with the adherence to principles of nuclear safety, radiation protection, occupational health and safety, fire protection and environmental protection.

In 2017, JAVYS, a.s., performed successfully all the planned activities within the V1 NPP decommissioning project in compliance with the valid schedule. We reduced the radiological inventory by means of decontamination works and we fulfilled the annual decommissioning plan of that nuclear power plant by means of the decontamination and dismantling of technological equipment, systems and civil structures, as well as by means of continuous and smooth processing of radioactive waste resulting from the V1 NPP decommissioning and of historical radioactive waste resulting from its operation. At the same time, it is necessary to emphasize that all the works were performed with the adherence to principles of nuclear safety, radiation protection, occupational health and safety, fire protection and environmental protection.

In 2017, the V1 NPP decommissioning project continued alike with the achievement of multiple significant milestones. The „ *Decontamination of the Primary*

**Circuit - Part 2**“ Project was essential, it was completed successfully in December 2017. Further projects included the „**Decontamination of Storage Pools and Further Contaminated Tanks**“ and „**Dismantling of Systems in Controlled Area - Part 1**“. The „**Dismantling of Reactor Coolant System Large Components**“ was the key project in 2017 and it will be a key project into the future. Its implementation was commenced in October 2017, after more than a one-year period of demanding public procurement and its completion is assumed for 2022. The project is monitored in detail by the international community and European Union institutions and represents a significant move forward for our company in relation to NPP decommissioning activities within the European Union.

I am glad in the same way that we completed successfully the construction project of „**Integral Radioactive Waste Storage on Bohunice Site**“, as well as the construction and commissioning of very low-level radioactive waste storage premises (Stage II) in Mochovce. Both the public and media monitored extraordinarily the „**Dismantling and Demolition of VI NPP Cooling Towers**“ in the past year.

At the end of 2017, all works related to the dismantling and cleaning of their spaces from asbestos materials were completed to the full extent and the implementation of demolition works on the upper section of cooling tower No. 1 shell was completed successfully in compliance with the contract schedule. All activities planned for 2017 were performed successfully.

In addition to the nuclear power plant decommissioning, the mission of our company in the assurance of the final part of nuclear energy also includes the spent nuclear fuel and radioactive waste management. In 2017, 132 pieces of nuclear power plant V2 fuel assemblies and 144 pieces of nuclear power plant EMO1,2 fuel assemblies were transported to the Interim Spent Fuel Storage in Jaslovské Bohunice for further long-term storage.

The radioactive waste management is performed using technological lines in nuclear facilities located in Jaslovské Bohunice and Mochovce, namely in an up-to-date and safe manner. In 2017, following the radioactive waste treatment and conditioning in the mentioned nuclear facilities, 354 pieces of fibre concrete containers containing low-level radioactive waste resulting from operations and decommissioning of nuclear facilities in Slovakia were transported and laid in the National Radioactive Waste Repository in Mochovce and 2,576.90 m<sup>3</sup> of very low-level radioactive waste were laid in the first module of the Very Low-Level Radioactive Waste Repository.

The portfolio of activities performed by our company also includes the assurance and safe management of radioactive materials of unknown origin captured in Slovakia and the safe management of institutional radioactive waste, e. g., from areas of health care, industry, but also from research facilities. In 2017, our company made 17 captures of radioactive materials and, performing those activities, it fulfilled its social re-

sponsible assignment again consisting, above all, in the protection of environment and health of the population in Slovakia.

JAVYS, a.s., also has its place in the international field. Our extensive and long-standing experience with the decommissioning of nuclear facilities and the processing of radioactive waste constitute a space to establish the company in the international market and give it a possibility to grow within this important nuclear industry segment. We offer services in the area of commercial activities and consultancy to foreign partners, but we also hold significant positions in international organizations.

I am proud that a JAVYS, a.s., representative will be chairing the CPD Programme of the OECD Nuclear Energy Agency (OECD-NEA) in Paris for two years, the Slovak nominee being elected to that post unanimously in November 2017.

The conclusion of the Memorandum of Understanding with the International Atomic Energy Agency (IAEA) in Vienna in the area of cooperation in the decommissioning of nuclear facilities and the management of radioactive waste and spent nuclear fuel also became another significant international appreciation for our work.

Such a formal recognition of the work done by our specialists received from prominent worldwide and European international professional organizations gives rise to a commitment to further improve the quality of our work and a contribution for the Slovak and worldwide societies. We are trying to meet the commitment by participating in preparations of international publications as well. In October 2017, it was, for example, the DAROD Project aimed at working with information in areas of decommissioning and environmental recovery of sites with historical nuclear facilities that were affected by non-standard events, which will make it possible that identified experience and corrective activities in those areas will contribute to a better emergency preparedness of nuclear facility operators and, thus, to the worldwide nuclear safety improvement.

The proved professional quality is also reflected in the commercial area. We offer commercial services to companies

in the Czech Republic, Italy and Germany, consultancy to companies in Croatia and Iraq.

Our company was also successful in a tender in the past year, giving a bid within the IDOM-JAVYS-ATP Consortium for consultancy in relation to the SERAW Processing Centre modernization, Kozloduj in Bulgaria. For our company, this new project represents both a benefit of increased sales, as well as a positive reference and a professional development opportunity for staff members participating in the project implementation.

The performance of international commercial activities brings new sources of profit to our company which makes it possible that we are not financed exclusively by public sources. Moreover, we pay dividends to the state on the profit generated and we comply properly with all further tax and levy obligations and, thus, we help improve the economic and social environments in the Slovak Republic in a double manner.

In connection with our activities, we also place extraordinary emphasis on the area of communications with self-government representatives and citizens and we are convinced that the timely and comprehensible communications towards both the lay and professional public are able to prevent from contingent misunderstandings. I am glad that I can appreciate correctness, responsiveness and material approach taken by representatives of municipalities in that area. The certainty of citizens that their health and surrounding environment are not endangered by our activities is first and foremost to us. That is why, we use all appropriate tools to inform the citizens, i. e., regular participations of our company representatives in meetings of Citizen Information Commissions, regular meetings with top representatives of concerned municipalities, but also media and the ‘U nás’ (***In Our Company***) company magazine that is distributed to all households in surrounding municipalities, to self-governments, schools, but also to significant institutions. The lay public are also kept informed about our activities by means of information centres in Jaslovské Bohu-

nice and Mochovce, as well as by making information available by means of our web page. I am pleased that we were able to inform self-government representatives and inhabitants that, in 2017, our nuclear facilities were operated in compliance with valid and updated safety documentation approved by regulatory bodies of the Slovak Republic and no violation of Technical Specifications for their safe operation occurred. The year 2017 was also successful in areas of occupational health and safety and fire protection. No fire was registered in JAVYS, a.s., nuclear facilities.

Trade union representatives are the second, equally important, group JAVYS, a.s., communicates with. The company respects the right of staff members to associate in trade unions and honours the mutual stable and correct cooperation. At present, the Company Collective Agreement is concluded with the social partner for the period from 2017 to 2018 and, within the meaning of its relevant provisions, the company meets its obligations towards staff members and trade union organizations operating at the Employer’s premises. Possible requirements submitted by staff members or points at issue are solved by the company in the form of a social dialogue in order to achieve solutions optimal for both the partners. Such a meeting was held in December 2017 last time where Amendment No. 1 to the Company Collective Agreement for the period from 2017 to 2018 was signed modifying, among others, also provisions governing the amount of wage allowances for work in difficult environment and environment harmful to health and for the on-call time, in relation to the increase in minimum wage.

Finally, my acknowledgements belong to the company staff members who participated to a significant extent in the achievement of positive results in all areas and I believe that the year 2018 will be a year as well when we will succeed in fulfilling specified objectives and commitments. Namely, both towards our business partners and towards the whole company. Performing its activities, JAVYS, a.s., wants henceforward contribute to the establishment of optimum living conditions for current and future generations.

Ing. Peter Čižnár, PhD., MBA  
Chairman of the Board of the Directors  
and CEO



# 02

## COMPANY BODIES

The Board of Directors of JAVYS, a.s.

**Chairman**  
Ing. Peter Čižnár, PhD., MBA

**Vice-Chairman**  
Ing. Anton Masár

**Members**  
Ing. Ján Horváth  
Ing. Miroslav Božík, PhD.  
Ing. Tomáš Klein (since 11 May 2017)

The Supervisory Board of JAVYS, a.s.

**Chairman**  
RNDr. Ing. Pavol Švec, CSc.

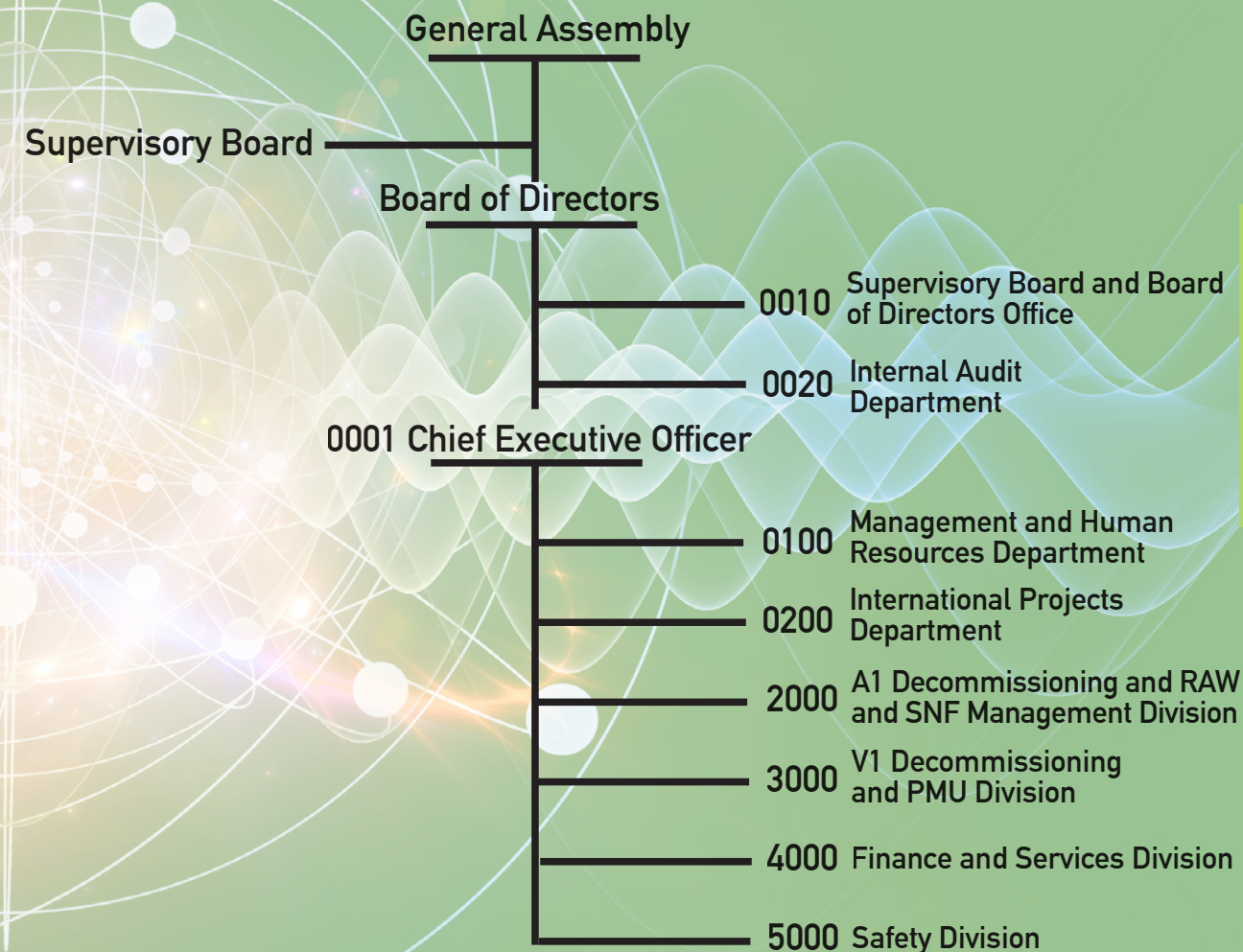
**Members**  
Ing. Rastislav Sedmák (by 25 May 2017)  
Mgr. Adrián Iványi (since 11 April 2017)  
Ing. Marián Zimmermann (by 25 May 2017)  
Ing. Ján Dudášik (since 11 April 2017)  
JUDr. Eva Polerecká (since 26 May 2017)  
JUDr. Jozef Červenka (by 25 May 2017)  
RNDr. Roman Jakubec  
Ing. Marián Vrtoch  
Ing. Daniel Vašina

### Execution of shareholder rights

Jadrová a vyradovacia spoločnosť, joint stock company (JAVYS, a.s.), executes shareholder rights in Jadrová energetická spoločnosť Slovenska, joint stock company, a joint venture with a foreign shareholder where 51 % of stock of Jadrová energetická spoločnosť Slovenska, joint stock company, is owned by JAVYS, a.s., and 49 % of stock of Jadrová energetická spoločnosť Slovenska, joint stock company, is owned by the Czech Power Group ČEZ. By establishing Jadrová energetická spoločnosť Slovenska, joint stock company, a space was created to prepare the new nuclear source construction project in Jaslovské Bohunice, with the company activities being governed to the full extent by Commercial Code and Company Statutes provisions in force.

## ORGANIZATIONAL STRUCTURE AND HUMAN RESOURCES

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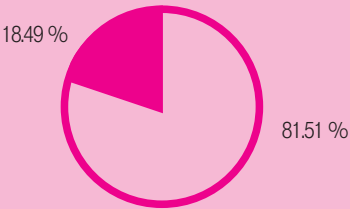


Human Resources

By 31 December 2017, JAVYS, a.s., employed 806 staff members, which is by 2 staff members less compared with the staffing level as to the same period last year.

Staff structure by 31 December 2017

Workers	149	18.49 %
Technical-administrative staff	657	81.51 %
Total	806	100 %



Training and education of staff members

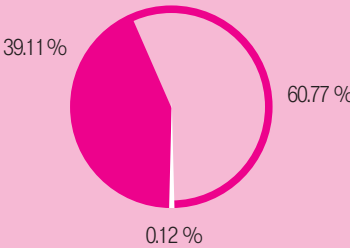
The training and education of staff members is an important process of providing qualified staff to perform operational and decommissioning activities on nuclear facilities of JAVYS, joint stock company (JAVYS, a.s.), the licence holder, managed and maintained by quality documentation and supervised by the state regulatory body. The Integrated Management System Manual defines the Professional Training Policy of JAVYS, a.s., staff members where the main company objective is specified as follows: **Prepare and maintain competent staff to ensure safe, reliable, ecological and economical operation of nuclear facilities of the company in the spirit of principles of safety culture and ALARA principles. The objective was successfully achieved, JAVYS, a.s., nuclear facilities were operated by competent staff who ensured safe, ecological and economical operation without any more marked negative impact on nuclear safety.**

During the year 2017, the objective was successfully achieved for all nuclear facilities within the meaning of planned professional training schedules and requirements specified by professional departments.

In connection with obtaining the licence to operate the Integral Radioactive Waste Storage nuclear facility and within the framework of licensing documentation preparations, all the conditions concerning the staff professional training were met. JAVYS, a.s., declared to the Nuclear Regulatory Authority of the Slovak Republic that qualified and professionally competent staff are provided within the meaning of the

Staff structure by education level by 31 December 2017

Elementary	1	0.12 %
Secondary	484	60.77 %
University	321	39.11 %
Total	806	100 %



Staff Professional Training System to ensure activities of the Integral Radioactive Waste Storage nuclear facility. The performance in compliance with Act of the National Council of the Slovak Republic No. 124/2006, Coll., on Occupational Health and Safety and on Amendments to Some Acts, as amended, with the Ordinance of the Ministry of Labour, Social Matters and Family of the Slovak republic No. 508/2009, Coll., and with other legal regulations aimed at safe performance of working activities on nuclear facilities was the main priority of the professional training in occupational activities.

The staff professional development was provided in the form of education courses and seminars with the emphasis on safety attributes of demolition works during the decommissioning of nuclear facilities, on the management control and project management, the staff training in the performance of the revised act on personal data protection and on education courses in case of amendments to legal regulations of the Slovak Republic.

STRATEGY AND QUALITY ASSURANCE



Strategy

The strategy of JAVYS, a.s., is to fulfil the company vision and mission while respecting the Energy Security Strategy of the Slovak Republic and the Draft of the National Policy and the National Program for the Management of Spent Nuclear Fuel and Radioactive Waste in the Slovak Republic. In 2017, JAVYS, a.s., implemented the strategy in the following areas:

**a) Areas of Management of RAW and SNF and Transport of RAW and SNF**  
Tasks were performed to ensure the effective management of RAW and SNF, the transport of RAW and SNF produced in nuclear facilities in the Slovak Republic; the collection, management and transports of institutional RAW, captured radioactive materials, as well as the provision of services within the front and back end of the nuclear fuel cycle on a commercial basis.

**b) Area of Decommissioning of Nuclear Facilities**  
Tasks related to the safe, effective and reliable A1 NPP decommissioning were performed in compliance with the Draft of the National Policy and the National Program for the Management of Spent Nuclear Fuel and Radioactive Waste in the Slovak Republic and with the approved A1 NPP Decommissioning Plan (at present, the Plan for Stages III and IV of the A1 NPP decommissioning) and tasks related to the safe, effective and reliable V1 NPP decommissioning were performed in compliance with the Draft of the National Policy and the National Program for the Management of Spent Nuclear Fuel and Radioactive Waste in the Slovak Republic, with the V1 NPP Decommissioning Strategy (at present, the Plan for Stage II of the V1 NPP decommissioning).

**c) Area of Operation of Nuclear and Other Facilities**  
Nuclear facilities intended for the management of RAW, IRAW, CRAM and SNF were operated safely, efficiently and reliably while adhering to conditions of nuclear safety, radiation protection, occupational health and safety and environmental protection so that no violation of the Technical Specifications occurred during the operation of these facilities.

**d) Area of Safety and Environmental Protection**  
Support services were carried out which provide permanently all activities related to nuclear, radiation and conventional safety, protection and security, environmental protection, emergency planning in compliance with decisions by supervisory bodies of the Slovak Republic for the processes of operation and decommissioning of nuclear facilities and the management of RAW and SNF.

**e) Areas of Economy and Services**  
In compliance with the strategy of an economically stable company, EBITDA performance was provided at the level specified in the business plan and financial budget for 2017. The procurement of goods, services and construction works was provided continuously on the basis of the Annual Procurement Plan of JAVYS, a.s., and the aggregate revenue volume from the sales of surplus property and recoverable material was in compliance with the plan.

**f) Area of Company Development**  
Tasks related to the modernization of radioactive waste treatment and conditioning technologies, the extension of storage capacities of RAW and SNF and RAW repositories were performed.

**g) Areas of Company Management and Human Resources**  
As to 1 January 2018, the organizational structure and functional diagram of Jadrová a vyraďovacia spoločnosť, a.s., was approved considering requirements for the meeting of the objectives specified in the company strategy and in the business plan and the financial budget for 2018 and in the medium-term business plan. The arrangement of organizational units and the assurance of the performance of individual processes and activities so that they correspond to company requirements and needs for further progress in the implementation of Stage II of the V1 NPP decommissioning and to activities related to Stages III and IV of the A1 NPP decommissioning were the reasons for the modification of the organizational structure and functional diagram of JAVYS, a.s. The staff professional training was implemented in compliance with the planned development and needs of the company.

**h) Area of Commercial Activities**  
The company participated in international projects aimed at the radioactive waste and institutional radioactive waste treatment and conditioning, at consultancy in areas of the decommissioning of nuclear facilities and the management of radioactive waste and spent nuclear fuel.

Quality Assurance

In 2017, based on the results of the audit performed by DNV-GL company, JAVYS, a.s., obtained internationally recognized certificates according to standards ISO 9001 (Quality Management System), ISO 14001 (Environmental Management System) and OHSAS 18001 (Occupational Health and Safety Management System). The certificates are valid for the following scope of activities: “The decommissioning of nuclear facilities and the management of radioactive waste and spent nuclear fuel”. Thus, the company strengthened its position in the national and international labour market, especially in connection with the development of commercial activities within foreign tenders in the form of participating in individual projects related to the JAVYS, a.s., subject of activities.

The certificates issued by the DNV-GL certification company confirm that the process management of management systems in areas of quality assurance, environmental protection, occupational health and safety complies with the criteria and requirements of the mentioned international standards. JAVYS, a.s., has also implemented a certified management system within the meaning of standard ISO/IEC 20000-1:2011 (IT Service Management System in compliance with the catalogue of administrative and support information services). The consistent compliance with the requirements of the implemented integrated management system has a positive impact on the improvement of safety culture as well, which is one of nuclear safety management instruments in JAVYS, a.s.

Valid transport and operation licences and permissions

Jadrová a vyraďovacia spoločnosť, joint stock company, performs a lot of activities and operates multiple technological sets within its entrepreneurship. Many of such activities are permitted by the state and, in compliance with legal regulations in force, certain conditions need to be met in order to perform the activities. Following the meeting of those conditions, the issue of a decision by the relevant body approving or permitting the given activity is usually required. Many of JAVYS, a.s., activities are especially strictly regulated and supervised. For example, the peaceful use of nuclear energy, activities related to radiation exposure, but additional activities also require to adhere to relevant legal regulations so that correct, safe and reliable operations of technological sets and, thus, of the whole company are ensured. The validity period of some licences is unlimited, that of many other licences is limited in time and it is necessary to update them. Individual licences or permissions include activities some of which are related to multiple JAVYS, a.s., organizational units, namely within multiple divisions as well, that is why, individual licences and decisions are categorized by areas of given activities for the sake of clarity. Some of the licences have a nature of decisions by relevant bodies, possibly they are licences issued on the basis of other facts (especially software licences). For the sake of completeness, the “Industrial Safety Certificate, level SECRET” is also given issued by the National Security Authority on 5 June 2015 with the validity period by 5 June 2020.



## Overview of Current Transport and Operational Licences, or Permissions for Individual JAVYS, a.s., Technological Sets

Type of decision	Number
Decisions concerning nuclear facilities	7
Decisions concerning transport facilities	13
Decisions concerning activities leading to radiation exposure (A1 NPP decommissioning, RAW PTT, ISFS)	51
Decisions concerning activities leading to radiation exposure (transports of RAW, IRAW, CRAM, UCE and SNF)	6
Decisions concerning activities leading to radiation exposure (management of RAW, IRAW, storage house construction)	5
Decisions concerning activities leading to radiation exposure (NRWR, VLLW)	6
Decision concerning activities leading to radiation exposure (FP LRAW)	3
Decision concerning activities leading to radiation exposure (IRAWS)	1
Decision concerning activities leading to radiation exposure (RAW PTT – bitumen product storage)	1
Decision concerning activities leading to radiation exposure (container with RAW from 'Mogilnik')	1
Decision concerning activities leading to radiation exposure (extension of radiation controlled area around the Active Water Purification Plant)	1
Decision concerning activities leading to radiation exposure (positioning of containers – Machine Hall)	1
Decisions concerning activities leading to radiation exposure (occupational health service)	3
Decisions issued to other activities performed by the A1 Decommissioning and RAW and SNF Management Division	5
Decisions issued for the area of business – power engineering	2
Decisions issued for the environmental protection area	8
Decisions issued for the area of railway transport operations	11

## YEAR IN BRIEF





On 23 March, members of the Slovak Nuclear Insurance Pool and the Czech Nuclear Insurance Pool listened with interest to the presentation on main JAVYS, joint stock company (JAVYS, a.s.), activities in the area of the final part of the Slovak nuclear energy in the Information Centre in Jaslovské Bohunice.



From 28 March to 30 March, within the regular monitoring of works implemented concerning the V1 NPP decommissioning, European Commission representatives Robert Kunde and Jean-Philippe Guisset paid a visit to JAVYS, a.s. During the monitoring mission, they also made themselves acquainted with the progress in the construction of new storage premises in Mochovce intended for low-level and very low-level wastes from the V1 NPP decommissioning.



From 20 June to 22 June, supported significantly by JAVYS, a.s., the international conference ECED 2017 – Eastern and Central European Decommissioning – was held in Trnava. It was aimed at a broad spectrum of aspects accompanying the decommissioning process of nuclear facilities and at the exchange of experience on the international level.



On 28 June, the regular emergency drill Gemini 2017 took place in JAVYS, a.s., to verify the timeliness of the Emergency Transport Rules and additional documentation governing the transport of radioactive materials, the functionality of technical communication means and the method of information exchange among the staff providing the transport, the preparedness of the emergency drive-out group and the performance of the intervention including protective measures taken on the spot.



On 10 July, the Deputy Minister for the management of the Power Engineering Section of the Ministry of Industry and Trade of the Czech Republic, Mrs. Lenka Kovačová, PhD, paid a visit to JAVYS, a.s. The negotiation topics included activities concerning the decommissioning of nuclear facilities, the creation of financial resources, the management of radioactive waste and spent nuclear fuel.



From 25 September to 29 September, the international IAEA training course aimed at the release of materials from the decommissioning of nuclear facilities into the environment was organized by JAVYS, a.s., in Bratislava. The educational event included the inspection of sites of A1 NPP and V1 NPP in Jaslovské Bohunice and of the National Radioactive Waste Repository in Mochovce.



On 27 September, the regular site-wide emergency drill Brest 2017 took place on the nuclear power engineering complex site in Jaslovské Bohunice aimed at the verification of activities to be performed by the JAVYS, a.s., Emergency Response Organization in interoperation with JESS, a. s., VUJE, a. s., and with security and rescue groups in response to a possible nuclear facility event on JAVYS, a.s., site. The simulated evacuation of persons in cooperation with the municipality of Jaslovské Bohunice and the roping down of an injured person were also practised.



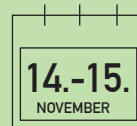
On 2 October, the first of the four cooling towers of the V1 Nuclear Power Plant, being decommissioned, began to be dismantled. The cooling towers were forming the panorama of Jaslovské Bohunice surroundings for 40 years. The scheduled completion date for the project to demolish the four cooling towers is the end of 2018.



From 23 October to 27 October, experts from the Nuclear Power Plant Ignalina visited JAVYS, a.s., nuclear facilities. The professional visit took place within the technical assistance programme of the International Atomic Energy Agency, by means of the Nuclear Regulatory Authority of the Slovak Republic and JAVYS, a.s.



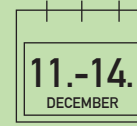
In October, the 5000th fibre concrete container with treated and conditioned radioactive waste was laid in the National Radioactive Waste Repository in Mochovce. The storage capacity of two operated double rows in the NRWR was gradually occupied up to 70 per cent during the month.



From 14 November to 15 November, JAVYS, a.s., was unanimously elected for a two-year term during 36th session of the Administrative Board of the Co-operative Programme for the Exchange of Scientific and Technical Information Concerning Nuclear Facility Decommissioning Projects (CPD Programme) in Paris, based on the candidacy for the Administrative Board Chairman. The CPD Programme established by the OECD Nuclear Energy Agency (OECD-NEA) is the only worldwide platform associating exclusively organizations immediately decommissioning nuclear facilities.



On 21 November, one of regular joint meetings among the JAVYS, a.s., management and representatives of the management of the Nuclear Regulatory Authority of the Slovak Republic was held. The nuclear regulatory body representatives familiarized themselves with current information on commercial activities performed by JAVYS, a.s., on the state and implementation of the V1 NPP decommissioning, focusing on current projects, and with information on the extension of the Interim Spent Fuel Storage. The joint meeting included the inspection of the new nuclear facility – the Integral Radioactive Waste Storage.



From 11 December to 14 December, DNV GL certification company auditors reviewed the meeting of requirements specified by standards ISO 9001:2015 (Quality Management System), ISO 14001:2015 (Environmental Management System) and OHSAS 18001 (Occupational Health and Safety Management System). JAVYS, a.s., has met the requirements of those international standards and maintained the validity of certificates of the mentioned management systems for the year 2018 as well.



On 12 December, the ZO JAVYS trade union organization conference took place attended by JAVYS, a.s., management representatives.



On 13 December, JAVYS, a.s., management signed Amendment No. 1 to the Company Collective Agreement for the period from 2017 to 2018 with ZO JAVYS trade union organization representatives.



On 13 December, a meeting among the company management and mayors of municipalities in the Jaslovské Bohunice region took place. Its aim was to inform the self-government representatives on current projects in the processes of A1 NPP and V1 NPP decommissioning, radioactive waste and spent nuclear fuel management, as well as in the area of commercial activities performed by the company.



On 13 December, based on a decision, the Nuclear Regulatory Authority of the Slovak Republic permitted to use the Very Low-Level Radioactive Waste Repository Mochovce, Stage II, including civil structures – the body of storage modules, Stage II, and the handling building.





In 2017, JAVYS, a.s., provided 17 cases of capture of radioactive materials of unknown origin. These were mainly the various components of agricultural and military technology.

JAVYS, a.s., transported 276 fuel assemblies of spent nuclear fuel from nuclear power plants in Jaslovské Bohunice and in Mochovce to the Interim Spent Fuel Storage in Jaslovské Bohunice. The spent fuel transport and management is one of areas of activities JAVYS, a.s., performs and provides them as a service to Slovenské elektrárne, joint stock company.

JAVYS, a.s., completed the project to transfer the fibre concrete container production technology from Trnava to reconstructed premises on Jaslovské Bohunice site. After two decades, the production plant became a part of the system of radioactive waste processing buildings on the Bohunice site.

05

## DECOMMISSIONING OF NUCLEAR FACILITIES

19



V1 NPP Decommissioning

The decommissioning of the nuclear power plant in Jaslovské Bohunice, i. e., V1 reactor units, was scheduled in two stages from 20 July 2011 to 31 December 2025. The objective of the V1 NPP decommissioning is to achieve the exemption of the nuclear facility from the scope of application of the Atomic Act by means of the dismantling of equipment, demolitions of buildings, management of waste from the V1 NPP decommissioning, including the processing and safe disposal of radioactive waste (RAW) in the National Radioactive Waste Repository in Mochovce, or their safe storage in the Integral Radioactive Waste Storage on the Jaslovské Bohunice site. The V1 NPP site will be released for industrial use after the completion of the decommissioning.

The Nuclear Regulatory Authority of the Slovak Republic issued Decision No. 900/2014 on 23 December 2014, based on which the implementation of the Stage II of the V1 NPP nuclear facility decommissioning started in 2015. The decision also included the permission to manage radioactive waste and the permission to manage nuclear materials in V1 NPP nuclear facility.

During the year 2017, the implementation of activities related to the V1 NPP decommissioning continued in compliance with the Plan for Stage II of the decommissioning and in accordance with the relevant decision of the Nuclear Regulatory Authority of the Slovak Republic for Stage II of the V1 NPP decommissioning.

Main V1 NPP decommissioning activities in 2017

- Locking and disconnection of systems,
- Implementation of projects – dismantling of unnecessary equipment and systems,
- Implementation of projects – decontamination of reactor coolant systems at both NPP reactor units, of the storage pool and contaminated tanks,
- Implementation of projects – demolition of NPP cooling towers,
- Management of radioactive, conventional and hazardous wastes,
- Implementation of projects – power plant modifications and adjustments to equipment and systems used during the V1 NPP decommissioning,
- Preparations of technical and tender documentation for projects of the V1 NPP decommissioning, Stage II,
- Construction of storage capacities for the storage of materials from the V1 NPP decommissioning.

In 2017, the D2-A project *Decontamination of the Primary Circuit – Part 2*, completed on 21 December 2017, was the key project from the viewpoint of the implementation of the overall V1 NPP Decommissioning Project and the assurance of the continuity of the V1 NPP decommissioning. The V1 NPP reactor coolant system decontamination was the condition for the implementation of further projects of V1 NPP decommissioning, Stage II (D4.2 Dismantling of Reactor Coolant System Large Components and others).

The D2.1 project *Decontamination of Spent Fuel Pools and Other Contaminated Tanks at the V1 NPP – Part 1* was another important V1 NPP decommissioning project in 2017. This project is an inevitable predecessor to the D4.4C project *Dismantling of Systems in V1 NPP Controlled Area – Part 2*. As to the end of 2017, all the planned works were implemented to the full extent and the project completion date is determined to be 26 February 2018.

In October 2017, the implementation of the extensive D4.2 project *Dismantling of Reactor Coolant System Large Components* was commenced, its completion being expected in 2022.

In 2017, the C8 project *Integral Storage of RAW at Bohunice Site* was completed. Radioactive waste from the V1 NPP decommissioning, as well as from the A1 NPP decommissioning, will be stored in the constructed facility, storable radioactive waste will be stored there temporarily and radioactive waste that cannot be stored in the National Radioactive Waste Repository as well (till the deep geological radioactive waste repository is commissioned). In 2017, very-low level waste storage premises (Stage II) were constructed and commissioned within the framework of the C9.4 project *Design and Erection of New Disposal Facilities for LAW and VLLW from V1 NPP at NRWR Mochovce*.

In December 2017, a decision to commission the facility and a permission to use the repository were issued by NRA SR.

In 2017, a permission was issued by NRA SR within the framework of the D3.1B project *Dismantling and Demolition of V1 NPP Cooling Towers* to remove civil structures of the V1 NPP cooling towers. Subsequently, their demolition itself was commenced. As to the end of 2017, all the works related to the dismantling and cleaning of spaces from dangerous asbestos materials were completed to the full extent. The implementation of demolition works on the upper part of cooling tower No. 1 shell, from the elevation of +120.00 m to the elevation of +40.00 m was also successfully completed in compliance with the contract schedule.

Preparation of periodic documents

In connection with the V1 NPP decommissioning project management, in compliance with the European Union requirements, and in accordance with Council Regulation (EURATOM) No. 1368/2013 of 13 December 2013, JAVYS, a.s., prepared, revised, and approved he following periodic documents during the year 2017.

- **Annual Work Programme – Bohunice Programme 2017**

The document was revised in the first half of 2017 on the basis of recommendations given by the European Commission from the interdepartmental comment giving process.

- **Annual Work Programme – Bohunice Programme 2018**

The document sets out objectives, expected results, performance indicators and the time schedule of the drawing of funds for the calendar year 2018. The document will serve as a background material for the European Commission to monitor and, subsequently, report the progress in the V1 NPP decommissioning for the calendar year 2018.

- **Monitoring Reports – Bohunice Programme (assessment period 1 to 6/2017 and 7 to 12/2017)**
- Since 2015, monitoring reports have been prepared regularly twice a year where the progress in the V1 NPP decommissioning is monitored and assessed for the monitored time period. The documents serve to the Monitoring Commission to compare planned objectives from the relevant Annual Work Programme with results achieved for the monitored time period.

Monitoring and audit

In March and October 2017, European Commission representatives paid regular visits to JAVYS, a.s., to monitor the progress in the V1 NPP decommissioning. In 2017, based on the delegation by the European Commission, Ernst&Young Advisory audit company performed an audit at JAVYS, a.s., aimed at the assessment of effec-

tiveness of the V1 NPP Decommissioning Programme implementation. The audit was performed in the middle of European Union financial support provision period (the multiannual financial framework 2014 to 2020), in compliance with the Implementation Decision EC No. C(2014)5449, Article 9. The final audit report will be submitted to the European Commission in 2018.

Bohunice Programme

V1 NPP decommissioning activities are co-financed from the EU Financial Support Provision Programme for measures related to the V1 NPP decommissioning through the Bohunice International Decommissioning Support Fund (BIDSF). The BIDSF fund financial resources intended for the implementation of individual V1 NPP decommissioning projects are drawn on the basis of grant agreements concluded between JAVYS, a.s., and the European Bank for Reconstruction and Development (EBRD). The signing of agreements themselves is preceded by the preparation of documentation to individual projects when JAVYS, a.s., as the beneficiary of the BIDSF fund financial assistance, identifies the individual projects at first, proposes methods of their technical implementation and funding, presents them during a meeting of the SR-EBRD Joint Committee and, finally, defends them by means of the National Coordinator (the Ministry of Economy of the Slovak Republic) during the Assembly of BIDSF Contributors session that is held twice annually.

As to the end of 2017, JAVYS, a.s., had 18 signed grant agreements available in the total amount of €467 million to finance the V1 NPP decommissioning projects. In August 2016, activities of the national implementation authority for the V1 NPP decommissioning were commenced – the Slovak Innovation and Energy Agency (SIEA). SIEA represents a parallel way of financing the V1 NPP decommissioning projects by EU funds, in addition to the funding by means of the EBRD implementation authority (BIDSF fund). Since 2016, the EU financial resources for the Bohunice Programme have been reallocated between the two mentioned implementation authorities. Since December 2016, it has been possible to allocate EU grants to V1 NPP decommissioning projects that will be also implemented through the SIEA.

On the basis of the Implementation Decision to the Council Regulation No. 1368/2013 (the financial decision of 24 August 2017) financial resources amounting to €32,176,000 were allocated as the EU financial assistance for the decommissioning of nuclear power plants for the period from 2014 to 2020 to SIEA and for the calendar year 2017. Cumulatively, EU financial resources amounting to €94,497,000 were allocated to SIEA since the commencing of its activities as to 31 December 2017. In July 2017, a grant agreement for the D4.4C.01 project Dismantling of Systems in V1 NPP Controlled Area – Part 2 was signed between JAVYS, a.s., and SIEA amounting to €26,296,00.



## Projects to which grants were awarded from EU funds in 2017

- D0 Project 'Implementation of Decommissioning Programme Using Human Resources Available at the Bohunice V1 NPP' (project No. 11 for the period from 2018 to 2019).
- D4.4C.01 Project 'Dismantling of Systems in V1 NPP Controlled Area – Part 2'.

The awarded grants for the mentioned projects represented cumulatively the amount of €40.5 million.

## Costs and resources to cover the V1 NPP decommissioning for the period from 7/2011 to 2017 (€)

V1 NPP	2011	2012	2013	2014	2015	2016	2017	Total
Total expenses (operational and investment)	26,070,182	46,307,673	44,523,089	67,078,417	51,745,947	45,853,912	54,175,036	335,754,256
Coverage resources								
NNF including depreciation	7,835,280	7,868,682	17,556,993	19,482,985	17,821,832	17,216,178	17,312,759	105,094,709
BIDSF including D0 and depreciation	10,936,129	25,448,338	25,774,314	46,605,562	32,389,849	27,853,127	35,817,132	204,824,451
JAVYS, a.s.	7,298,773	12,990,653	1,191,782	989,870	1,534,266	784,606	1,045,145	25,835,096
Total resources	26,070,182	46,307,673	44,523,089	67,078,417	51,745,947	45,853,912	54,175,036	335,754,256
Of that: Slovak resources	15,134,053	20,859,335	18,748,775	20,472,855	19,356,098	18,000,784	18,357,904	130,929,804

% of financing for the V1 NPP decommissioning from Slovak resources: 39 %

## Contracts concluded for the BIDSF projects in 2017

- D4.1 Modification of the Plant and Installation of New Equipment
- B6.6A Decommissioning Support Surveys
- D4.4A1 Modification of Systems in AKOBOJE System
- D4.4B Dismantling of Systems in V1 NPP Controlled Area – Part 1
- D4.2 Dismantling of Reactor Coolant System Large Components

The financial volume of the contracts concluded for those BIDSF projects represents cumulatively €134,138,000 and they will be implemented continuously by the end of 2022. All the contracts were concluded on the basis of results of tenders performed according to procedures in compliance with the EBRD Procurement Rules and Policy.

## IMPLEMENTATION OF BIDSF PROJECTS IN 2017

Projects under implementation during the year 2017

Project acronym	Project name	Course of implementation
A1.8	PMU Consultant (Phase 8)	01/2016 – 12/2018
A5-A3	Optimization of Electric Scheme	11/2016 – 05/2018
B6.6A	Decommissioning Support Surveys	03/2017 – 03/2022
C8	Integral Storage of RAW at Bohunice Site	01/2014 – 10/2017
C7-A4	Metallic RAW Melting Facility	09/2016 – 12/2018
C9.4	Design and Erection of New Disposal Facilities for LLW and VLLW from V1 NPP Decommissioning at NRWR Mochovce	01/2016 – 05/2019
C15-A	Integrated computer system for V1 NPP decommissioning logistic system	09/2014 – 05/2018
D0	Implementation of the Decommissioning Programme Using the Human Resource Available at Bohunice V1 NPP	01/2017 – 12/2017
D2-A	Decontamination of the Primary Circuit – Stage 2	09/2016 – 12/2017
D2.1	Decontamination of Spent Fuel Pools and Other Contaminated Tanks in the V1 NPP – Part 1	10/2016 – 02/2018
D3.1B	Dismantling and Demolition of V1 NPP Cooling Towers	08/2016 – 12/2018
D4.1	Modification of the Plant and Installation of New Equipment	02/2017 – 02/2020
D4.2	Dismantling of Reactor Coolant System Large Components	10/2017 – 12/2022
D4.4A	Auxiliary Buildings System Removal – Stage I	05/2016 – 07/2018
D4.4B	Dismantling of Systems in V1 NPP Controlled Area – Part 1	09/2017 – 03/2021
D4.4A1	Modification of Equipment in AKOBOJE System	04/2017 – 04/2019



Projects completed during the year 2017

Project acronym	Project name	Course of implementation
C8	Interim Storage of RAW at Bohunice Site	01/2014 – 10/2017
D2-A	Decontamination of the Primary Circuit – Stage II	09/2016 – 12/2017

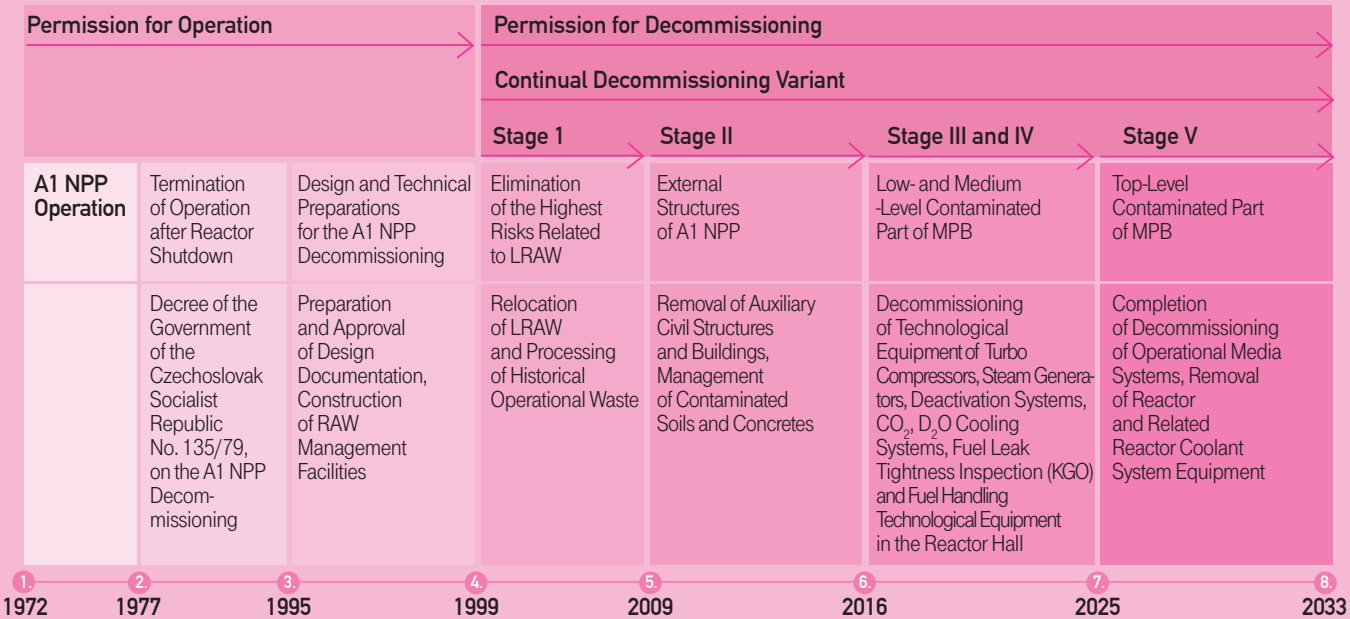
As to 31 December 2017, the total of 53 projects was completed (2 of which in 2017). In 2017, 6 projects were under implementation and 2 projects were under preparations for the procurement which is in compliance with the V1 NPP Decommission Plan.

A1 NPP Decommissioning

The A1 NPP decommissioning has been implemented in a continuous decommissioning process, divided into five consecutive stages, with the planned completion of the A1 NPP decommissioning in 2033. The implementation of Stage I of the A1 NPP decommissioning was commenced in 1999 and it was completed in 2009. Since 2009, the A1 NPP decommissioning continued during Stage II which was completed as to 30 September 2016, based on the achievement of all the determined objectives

specified in the permission documentation approved by state administration bodies. Since 1 October 2016, the continuous process of the A1 NPP decommissioning has proceeded within the meaning of the permission documentation approved by the state administration bodies during Stages III and IV.

A1 NPP Decommissioning Timeline



The subject of the running A1 NPP decommissioning Stages III and IV includes the decommissioning of the reactor coolant system technological equipment, the technological equipment used in the past to prepare spent nuclear fuel for the transport, two steam generators, the turbo compressor oil management system, the heavy water management system technological equipment, the CO<sub>2</sub> management system, the reactor coolant system technological equipment cooling system and other connected and related technological equipment found in the A1 NPP Main Production Building. The A1 NPP decommissioning Stages III and IV also include the continuation of processing the radioactive waste from the decommissioning and historical radioactive waste.

In compliance with objectives of the A1 NPP decommissioning Stages III and IV, the following activities were performed in particular in 2017:

- processing of 33 pieces of A1 NPP SNF long-term storage caskets,
- processing of 2 m<sup>3</sup> of chrompik III medium originating from the A1 NPP SNF long-term storage caskets, using VICHK technological line,
- processing of 2,615 kg of sludges originating from the A1 NPP SNF long-term storage pool, using SUZA technological line, including the production of 108 pieces of 200-litre barrels with a fixed product,
- processing of 24.74 m<sup>3</sup> of sludges from tank 1/3 in the LRAW repository, using ZFK facility, including the

- production of 260 pieces of 200-litre barrels with a fixed product,
- decommissioning of the D<sub>2</sub>O cooling circuit technological equipment, the CO<sub>2</sub> cooling system technological equipment and the control system of dividing valves in the Reactor Building,
- decommissioning of technological systems constituting the turbo compressor oil management system, the emergency safety valves and the steam generator feed-water pipelines, the electrical equipment, the I & C equipment and HVAC systems in the Intermediate Machine Hall,
- decommissioning of technological systems found in the gas management system building,
- decommissioning of the underground HVAC pipeline channel of external A1 NPP buildings and of pipeline routes of PK1 pipeline channel,
- decontamination of civil structural parts, the management of soils and concretes, the radioactive waste monitoring, the monitoring and sanitation of ground water and percolating ground water.

By means of the continuous radioactivity inventory reduction through the decontamination and dismantling of technological equipment, systems and civil structures of the decommissioned A1 NPP buildings and by means of the continuation to process radioactive waste resulting from the A1 NPP decommissioning and of historical radioactive waste resulting from operations, JAVYS, a.s., implemented all planned A1 NPP decommissioning activities in 2017, in compliance with the schedule of works for the year 2017, derived from the A1 NPP Decommissioning Plan, Stages III and IV approved by relevant state administration authorities. The determined plan of activities for the year 2017 in the A1 NPP decommissioning area, including the management of radioactive waste resulting from the A1 NPP decommissioning, was fulfilled to the full extent with the adherence to principles of nuclear safety, radiation protection, occupational health and safety, fire protection and environmental protection.



# RADIOACTIVE WASTE MANAGEMENT

Individual activities within radioactive waste (RAW) management processes were performed in the following nuclear facilities of the company, while adhering to conditions of nuclear safety, radiation protection, occupational health and safety, fire protection and environmental protection:

- **RAW PTT** – Radioactive Waste Processing and Treatment Technologies in Jaslovské Bohunice
- **FP LRAW** – Final Processing of Liquid Radioactive Waste in Mochovce
- **NRWR** – National Radioactive Waste Repository in Mochovce

## Radioactive Waste Processing and Treatment

The implementation of the A1 NPP and V1 NPP decommissioning processes themselves within the scope of the management of radioactive waste from the decommissioning of those nuclear facilities, moreover, the ma-

nagement of radioactive waste from the operated V2 NPP and EMO1,2 reactor units operated by Slovenské elektrárne, joint stock company, as well as the management of radioactive waste from non-nuclear facilities, is the key task for the operation of the following nuclear facilities – the Radioactive Waste Processing and Treatment Technologies in Jaslovské Bohunice and the Final Processing of Liquid Radioactive Waste in Mochovce. The RAW PTT nuclear facility consists of the Bohunice Radioactive Waste Treatment Centre (BRWTC), bituminisation lines, the low-level water purification plant, radioactive waste sorting workplaces, metallic radioactive material fragmentation and decontamination workplaces, used HVAC filters and used electrical cables processing workplaces.

Facilities processing radioactive concentrates and saturated ionexes from EMO1,2 operations are operated in the FP LRAW nuclear facility.

Subsequently, the processed low-level RAW are inserted into fibre concrete containers and treated by cementation in RAW PTT and FP LRAW nuclear facilities and transported to the JAVYS, a.s., National RAW Repository in Mochovce. In 2017, 262 pieces of fibre concrete containers with RAW were processed in this manner in RAW PTT and 92 pieces of fibre concrete containers with RAW were processed in this manner in FP LRAW.

## Overview of amounts of treated and processed radioactive waste in 2017

Nuclear facility	Type of RAW (measuring units)	Processed amounts
RAW PTT	Combustible solid RAW (t)	111.426
	Combustible liquid RAW (m³)	16.774
	Compactible RAW (t)	474.837
	Metallic RAW (t)	255.742
	Liquid RAW (m³)	262.175
	Used HVAC filters (t)	16.242
FP LRAW	Liquid RAW (m³)	91.217
	Saturated ionexes (m³)	33.585

## RAW Transports

During the year 2017, 708 transports of RAW were performed in certified transport package sets: 200 l Meva barrel, ISO container, shipping containers PK I/DOW, PK II /SLUDGES, PK III /BARRELS, PK/SK, PK/SK 2 and FCC.



RAW Disposal

The National Radioactive Waste Repository nuclear facility in Mochovce serves for the final disposal of treated low-level RAW and very low-level RAW generated during operations and decommissioning of nuclear facilities in the territory of the Slovak Republic, institutional RAW and CRAM and very low-level radioactive waste.

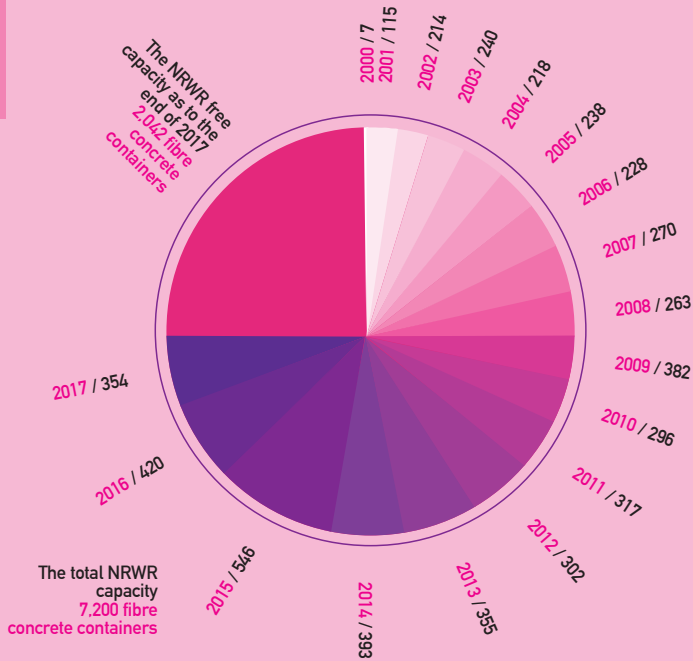
Fibre concrete containers filled-up with treated low-level RAW are finally disposed in storage boxes of operated double rows in the Repository, after their transportation from RAW PTT and FP LRAW nuclear facilities. Since 2016, approved packed forms

(large-volume bags and barrels) with that type of waste have been stored in the Repository storage structures constructed for very low-level radioactive waste. During the year 2017, 354 fibre concrete containers with RAW were stored in the second double row of storage boxes and 2,576.90 m³ of very low-level RAW were stored in the VLLW Repository.

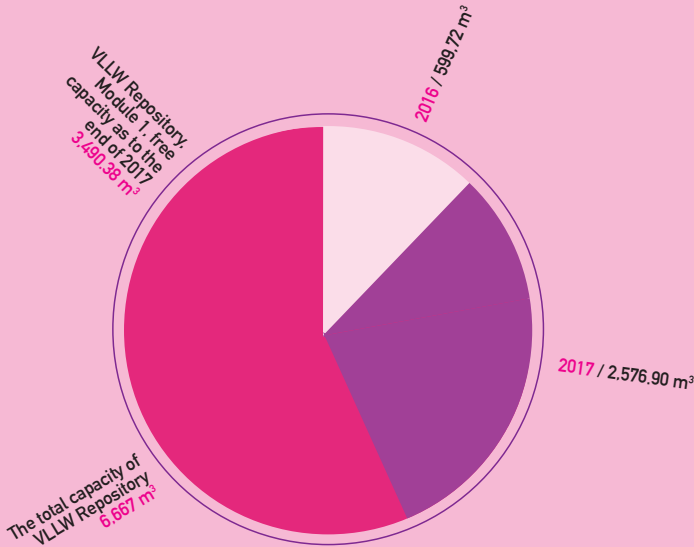
Overview of FCC Transports and Storage in NRWR in 2017

RAW treatment in FCC (pcs)		Total number of FCC stored in NRWR (pcs)
RAW PTT	FP LRAW	
262	92	354

Overview of NRWR Capacity Occupation as to 31 December 2017



Overview of filling of VLLW Repository, Module 1, as to 31 December 2017



IRAW and CRAM Management

JAVYS, a.s., is an organization authorized to manage emitters and radioactive waste of unknown origin, unused emitters and radioactive materials. In 2017, 17 captures of sources of ionizing radiation of unknown origin were performed, representing, for example, parts of agricultural, military and medical equipment. From their contamination point of view, for example radio-nuclides <sup>60</sup>Co and <sup>238</sup>U-rad and <sup>226</sup>Ra were identified. Following their identification, the captured radioactive materials were transported to be further processed in JAVYS, a.s., nuclear facilities, or in the IRAW and CRAM Management Facility on the Mochovce site.

In addition, based on concluded contractual relationships, IRAW with the total weight of 7,383.02 kg were taken from the following companies: Smrečina Hofatex, a. s., Banská Bystrica, FCHPT STU Bratislava, Vojenský útvar 1056 Zemianske Kostolány, Fakultná nemocnica s poliklinikou Žilina, Synlab Slovakia, s. r. o., in 2017. The IRAW represented, above all, used closed emitters, liquid scintillators, liquid and solid reference standards of radioactivity, contaminated laboratory waste (gloves, glass, etc.), parts of military equipment, and materials containing natural radionuclides as well.

# SPENT NUCLEAR FUEL MANAGEMENT

Following the achievement of determined parameters, spent nuclear fuel produced in reactor units of the Slovak nuclear power plants is subsequently transported and stored for long periods of time in the JAVYS, a.s., Interim Spent Fuel Storage nuclear facility in Jaslovské Bohunice.

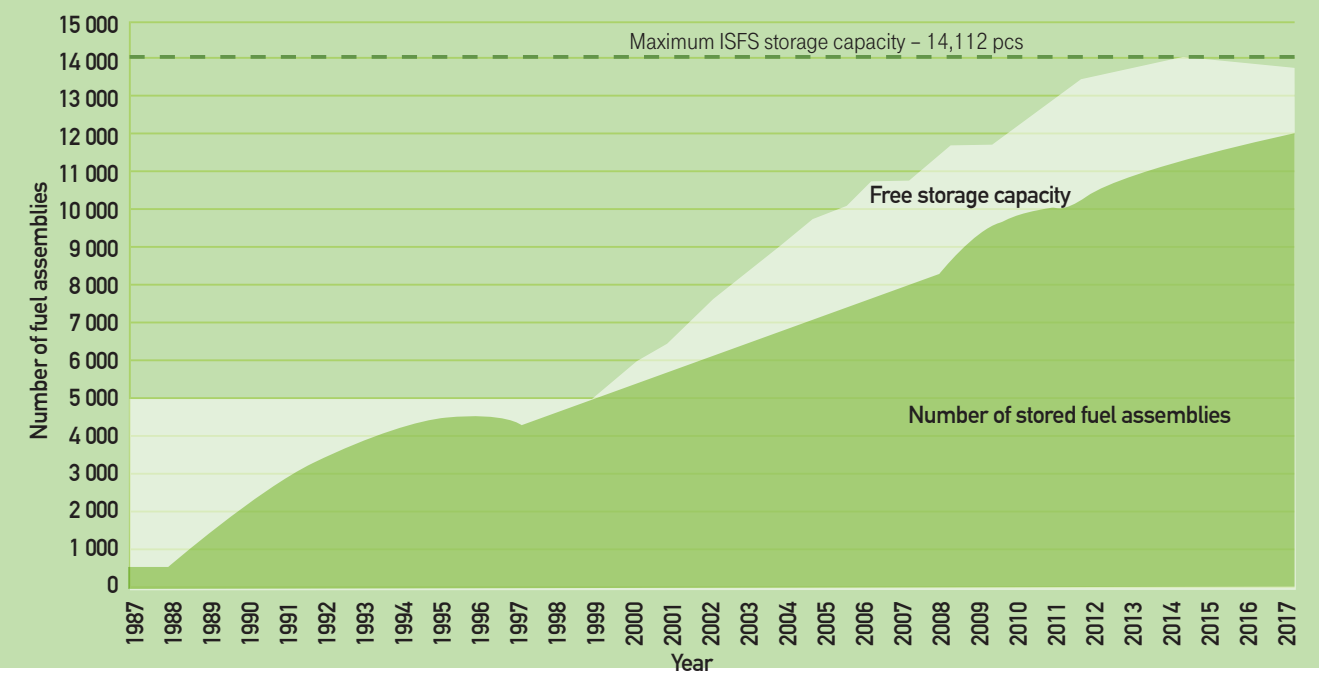
## Overview of Spent Nuclear Fuel Transports in 2017

SNF Producer (in number of pcs)		Number of circulations	Number of transported fuel elements (pcs)
SE, a. s. V2 NPP	SE, a. s. EMO 1,2 NPP		
132	144	6	276

In 2017, spent nuclear fuel was stored in three ISFS storage pools, in containers of KZ-48 and T-13 type. The fourth pool served as a stand-by pool. In total, 12,042 pieces of fuel elements were stored in ISFS as to 31 December 2017, out of which 5,143 pieces were from the V1 NPP, 4,979 pieces were from the V2 NPP and 1,920 pieces were from EMO1,2.

## Overview of Continuous ISFS Filling with Spent Nuclear Fuel as to 31 December 2017

ISFS storage capacity as to 31 December 2017 – 13,980 pcs





## Nuclear Safety

The compliance with the requirements for nuclear safety is a priority for JAVYS, a.s. This was declared in the policy and objectives, which are among top documents of the company integrated management system.

Requirements of legal regulations of the Slovak Republic and nuclear safety supervisory authorities were met for all nuclear facilities operated by the company on Jaslovské Bohunice and Mochovce sites. During the year 2017, the nuclear facilities were operated in accordance with the valid and current safety documentation approved by the supervisory authorities of the Slovak Republic, without any violation of the Technical Specifications for their safe operations, or decommissioning. Operational safety reviews of JAVYS, a.s., nuclear facilities were performed at prescribed intervals by means of operational safety indicators. The achieved evaluations confirmed the professional work of the staff and high reliability of technological equipment.

Following the completion of the complex periodical nuclear safety review of the FP LRAW nuclear facility in compliance with Ordinance of NRA SR No. 33/2012, Coll., all measures specified in the Integral Plan for the Implementation of Suggested Corrective Measures and Safety Improvements to Remove Deviations Identified on the FP LRAW Nuclear Facility were taken on the FP LRAW nuclear facility. 11-BSP-001 FP LRAW Nuclear Facility Final Safety Analysis Report and quality plans for nuclear facilities were updated. The complex periodical nuclear safety review of nuclear facilities is a standard practice on the international level.

JAVYS, a.s., has become a holder of the following licences: the licence for the use of the Integral Radioactive Waste Storage construction on the Bohunice site and the licence for the operation of the Integral Radioactive Waste Storage nuclear facility and for the RAW management in that nuclear facility.

A permission was issued to use the VLLW Repository construction Mochovce, Stage II, and the safety documentation was updated including 12-BSP-001 NRWR Mochovce

Final Safety Analysis Report, both for the needs of the NRWR nuclear facility operation.

No safety significant operational event was identified for the assessed time period.

The total of 36 inspections was performed by NRA SR inspectors during the year 2017. Out of that:

14 inspections were aimed at supporting activities for JAVYS, a.s., 7 inspections were performed at the V1 NPP, 5 inspections were performed at the A1 NPP, 1 inspection was performed at RAW PTT, 2 inspections were performed at ISFS, 2 inspections were performed at FP LRAW, 3 inspections were performed at NRWR, 2 inspections were performed at IRAWS.

In 2017, IAEA inspectors performed 3 physical inventory checks in nuclear material balance areas at the V1 NPP, A1 NPP and in the ISFS and 1 inspection related to the nuclear material condition in the ISFS, in interoperation with Euratom inspectors.

The Nuclear Regulatory Authority of the Slovak Republic issued the total of 74 decisions for JAVYS, a.s., in 2017.

Based on the Decision of NRA SR No. 378/2017 of 10 October 2017, a permission was issued to commission the new nuclear facility IRAWS and, subsequently, based on the Decision No. 423/2017 of 1 December 2017, a permission was issued to operate the IRAWS and manage RAW therein.

Based on the Decision No. 435/2017 of 7 December 2017, the permission specified in the operative part of the NRA Decision No. 338/2016 was changed from the original wording „permission to operate the NRWR nuclear facility, section 11st and 2nd double rows of storage boxes to store LAW, and section to store VLLW, Stage I“ into „permission to operate the NRWR nuclear facility, section 11st and 2nd double rows of storage boxes to store LAW, and section to store VLLW, Stage I and II“.

Based on the Decision No. 276/2017 of 25 July 2017, the NRA SR issued the approval to implement the change affecting nuclear safety during the decommissioning of the V1 NPP nuclear facility within the scope of the implementation of BIDSF D2-A Project “Decontamination of the Primary Circuit – Stage II”.

Based on the Decision No. 212/2017 of 31 May 2017, the NRA SR issued the permission to remove the construction “Dismantling and Demolition of V1 NPP Cooling Towers”.

With regard to a low number of operational events affecting nuclear safety, the year 2017 can be assessed very favourably. All the operational events were of a less significant nature. Three operational events were registered of which, within the meaning of the Atomic Act, no one event was reportable to supervisory authorities. In compliance with the International Nuclear Event Scale (INES), all the events were classified as “No Safety Significance” events (i. e., “Below INES Scale”).

Radiation Protection

All the activities important from the radiation protection point of view are subject to the dose load optimization within the meaning of legal regulations of the Slovak Republic in force and of the JAVYS, a.s., internal quality assurance system prior to their permission, during their implementation and after their completion. The systematic monitoring of radiation characteristics of the working environment, both the operational and official monitoring of doses received and, at the same time, the compliance with radiation protection rules and the ALARA principle during the implementa-

tion of activities, were performed in the working environment of radiation controlled areas of the JAVYS, a.s., nuclear facilities in 2017 as well. The maximum individual effective dose that did not exceed the prescribed annual limits (50 mSv) is one of the strictly monitored indicators of the radiation protection level for persons working in the JAVYS, a.s., radiation controlled areas.

Maximum individual effective dose E (mSv) in 2017

JAVYS, a.s.	KP-A	% of the limit	KP-V	% of the limit	KP-U	% of the limit	KP-R	% of the limit
JAVYS, a.s., staff members	6.100	12.20	1.754	3.51	1.750	3.50	0.0	0.0
Contractors	9.282	18.56	6.748	13.50	0.111	0.22	0.0	0.0

*Explanatory notes:*  
*KP-A the radiation controlled areas in premises of the A1 NPP, being decommissioned, and in premises including RAW processing and spent nuclear fuel storage technologies in Jaslovské Bohunice*  
*KP-V the radiation controlled area of the V1 NPP in Jaslovské Bohunice, being decommissioned*  
*KP-U the radiation controlled areas of NRWR, FP LRAW and VLLW in Mochovce*  
*KP-R the radiation controlled area of IRAW and CRAM in Mochovce*

Inspection activities in the radiation protection area were performed by the Public Health Authority of the Slovak Republic (PHA SR). At the V1 NPP, the inspections were aimed in particular at the implementation of the Stage 2 decommissioning projects (D4.3A project “Dismantling of Insulations in the V1 NPP Controlled Area”, D2.A project “Decontamination of the Primary Circuit – Stage II”, D2.1 project “Decontamination of Spent Fuel Pools and Other Contaminated Tanks in the V1 NPP – Part I”, and D4.4A project “Auxiliary Buildings System Removal – Stage I”). At the same time, the PHA SR also verified the adherence to radiation protection rules in the radiation controlled areas and the system of material exemption from the administrative supervision. Inspections performed in RAW PTT, A1 NPP and ISFS nuclear facilities primarily regarded to status checks of applications being prepared and to the review of facts declared in the work programs that were discussed by the ALARA Commission and passed to PHA SR for approval. During the inspections performed in RAW PTT and FP LRAW nuclear facilities, the PHA SR assessed the calibration of equipment, access and mode of the radiation controlled area. Inspections regarding the impact of the operation on radiation burden of the population are monitored by JAVYS, a.s., through the Laboratories of Radiation Supervision of Surroundings in Trnava and in Levice, belonging to Slovenské elektrárne, a. s. The laboratories monitor the surroundings by means of a network of monitoring stations connected to three circuits in the surroundings of nuclear facilities located in Jaslovské Bohunice and by means of laboratory measurements of samples taken from the en-

vironment. Results of sample measurements and analyses of almost 1,500 samples of air, soil, water, vegetation and agricultural products for the year 2017 prove a minimum impact of operated and decommissioned nuclear facilities on the surroundings. The impact of the operation on dose burden of the population is assessed by JAVYS, a.s., continuously on a quarterly basis using a special program. The program, approved by the state supervisory authority, PHA SR, applies internationally accepted models of dissipation of radioactive substances, takes into account local conditions and uses the current statistical data. All gaseous and liquid discharges from JAVYS, a.s., nuclear facilities and the actual meteorological situation enter the program. The maximum calculated values of the individual effective dose E for 2017 are on the level of 0.65 % in the populated area, and on the level of 0.66 % in the unpopulated area of the annual limit of exposure per a representative individual from the population. The calculated values of individual effective doses are on a much lower level than the level of radiation burden of the population due to the natural background and medical diagnostic examinations.

Occupational Health and Safety

The occupational health and safety in JAVYS, a.s., was provided in compliance with relevant provisions of Act of the National Council of the Slovak Republic (NC SR) No. 311/2001, Coll., Labour Code, as amended, and with Act of NC SR No. 124/2006, Coll., on Occupational Health and Safety and on Amendments to Some Acts and Further Related Regulations. Inspections of meeting requirements resulting from the above mentioned acts and legal regulations were performed by safety-technical service technicians. In 2017, one registered accident was recorded in JAVYS, a.s., i. e., an accident requiring a staff member inability to work lasting more than three days, and two filed staff accidents not requiring any inability to work.

Workplaces including a risk factor – noise, vibrations, aerosols and radioactive radiation – are identified in JAVYS, a.s., based on decisions by the Regional Office of the Public Health Authority. 559 staff members worked at the above mentioned workplaces, out of which 60 women. Staff members at workplaces where working activities are performed including the increased danger to health resulting from the working conditions are paid higher attention. The staff members are invited regularly to medical examinations aimed at particular risk factors. The prevention of accidents and occupational diseases on at-risk workplaces is ensured by means of allocating appropriate personal protective equipment within the meaning of operational orders and risk judgements. In order to improve the quality of working conditions and to increase the effectiveness of work productivity and quality, JAVYS, a.s., organized an education course „OHS Attributes during Demolition Work with Emphasis on the V1 NPP Decommissioning“ attended by the Labour Inspectorate, Nitra. The objective was to familiarize JAVYS, a.s., staff members participating in nuclear power plant decommissioning activities with the elimination of risks and staff members' duties when providing tasks in the OHS care area.

During the year 2017, the Regional Office of the Public Health Authority performed 4 inspections in JAVYS, a.s., related to the issue of a decision to commission and inspect the premises of at-risk workplaces (focused on working environment factors). In 2017, JAVYS, a.s., defended the internationally recognized certificate in compliance with standard OHSAS 18001 granted by the DNV GL certification company. The fact that the certificate was defended gives a confirmation that the management process in the occupational health and safety area in JAVYS, a.s., meets high criteria and requirements specified by the above mentioned standard.

Fire Protection

No fire was recorded in JAVYS, a.s., in 2017. Tasks in the fire protection area are provided by professionally competent persons – fire protection technicians – in JAVYS, a.s. In 2017, 442 preventive fire protection inspections were performed. The inspections were aimed at the adherence to fire protection regulations within all the company premises and at inspections of work performed on the basis of written orders – the performance of work including increased fire risk. During the preventive fire protection inspections, increased attention was paid to premises where decommissioning or demolition works are performed.



## Emergency Planning

Within the meaning of requirements specified by the Atomic Act and legal regulations related to the emergency planning area, a separate emergency response organization is established in JAVYS, a.s., headed by the JAVYS, a.s., Emergency Commission that is competent to settle events on all nuclear facilities of the company. In 2017, shift staff emergency drills were held regularly in all the nuclear facilities (in total, 38 shift staff emergency drills took place). Emergency drill GEMINI 2017 was focused on the practising of procedures to be applied to the transport of radioactive materials within the territory of the nuclear facility required (the procedures) by the Emergency Transport Rules.

The state of JAVYS, a.s., emergency preparedness on the Jaslovské Bohunice site was verified by the site-wide emergency drill BREST 2017 aimed at the settlement of a 2nd degree event on the V1 nuclear facility and of a 3rd degree event on the V2 nuclear facility. All JAVYS, a.s., staff members and all persons staying in the territory of the company nuclear facilities on the Jaslovské Bohunice site, including contractor staff members, were involved in exercises made within the site-wide emergency drill. During shift staff emergency drills and professional group exercises, the emergency response organization proved its functionality.

In 2017, the IRAWs nuclear facility operation was approved and the internal emergency plan of the IRAWs nuclear facility was prepared and approved, based on the Decision of NRA SR No. 382/2017 of 10 October 2017.

The following sizes of threat areas are approved by the Nuclear Regulatory Authority of the Slovak Republic for JAVYS, a.s., nuclear facilities at present:

- the common threat area for the V1 NPP, A1 NPP, RAW PTT and ISFS on the Bohunice site delimited by the barrier of the guarded area of JAVYS, a.s., nuclear facilities on the Bohunice site, approved by the Decision of NRA SR No. 719/2014, of 26 September 2014,
- the threat area for NRWR on the Mochovce site determined as a territory bounded by the nuclear facility boundary, delimited by the barrier of the guarded area, i.e. the fencing of NRWR on the Mochovce site, approved by the Decision of NRA SR No. 66/2017 of 20 February 2017,
- the threat area for FP LRAW on the Mochovce site determined as a territory bounded by the site boundary of nuclear facilities belonging to the Slovenské elektrárne, a. s., Nuclear Power Plant Mochovce, plant, delimited by the barrier of the guarded area of this nuclear facility, approved by the Decision of NRA SR No. 5/2007 of 8 January 2007,

- the threat area size delimitation of the IRAWs nuclear facility, based on the Decision of NRA SR No. 381/2017 that entered into force and became executable on 10 October 2017.

Analyses, based on which the threat areas were determined, have shown that the operation or decommissioning of JAVYS, a.s., nuclear facilities on the Jaslovské Bohunice and Mochovce sites show a negligible impact on the population and the environment in the surroundings of these facilities.

## ENVIRONMENTAL PROTECTION

JAVYS, a.s. meets the objective and the mission – to perform all activities with respect to the environmental protection, by maintaining the certified environmental management system in compliance with standard ISO 14001: 2015 Environmental Management Systems. The functionality and implementation of this system were verified by the independent certification company Det Norske Veritas from 11 to 14 December 2017 and, within the overall IMS audit, the validity of the internationally recognized certificate was confirmed again to JAVYS, a.s.

Within the issued decisions, JAVYS, a.s., fulfilled or is fulfilling all the imposed conditions, mainly in the area of determined indicators of pollution in discharged waste water and in emissions into the air with a large margin against the specified limits. During the year 2017, all the limited parameters specified for JAVYS, a.s., in the decisions by relevant supervisory and state authorities were adhered to.

### Water Management System

In 2017, 42,576 m<sup>3</sup> of drinking water were consumed (Jaslovské Bohunice, Trnava, Bratislava, Mochovce sites). Compared to 2016, it is less by 6,836 m<sup>3</sup>, which represents a decrease in consumption by 13.8 %. The consumption of cooling water was 317,919 m<sup>3</sup> in 2017, decreasing by 0.19 % compared to the year 2016. In 2017, 429,392 m<sup>3</sup> of wastewater were discharged into the recipient of Váh, which is a decrease by 3.8 % compared to the previous year. All wastewater supervision analyses performed in an accredited laboratory confirmed that the quality of the discharged water was below the limits specified by national and supervisory authorities. In 2017, the costs of the water management system amounting to €134,636.01 represent a decrease by 10.2 % compared to the year 2016, namely due, in particular, to the decrease in the consumption of drinking water (Jaslovské Bohunice, Bratislava) and surface (cooling) water on the Jaslovské Bohunice site.

### Air Protection

In 2017, JAVYS, a.s., operated 9 air pollution sources in all categories – 1 large source, 5 medium sources and 4 small sources. The total emissions released from all the air pollution sources were as follows: SO<sub>2</sub> – 1.023 kg, C<sub>org</sub> – 10.245 kg, particulate pollutants – 39.782 kg, CO – 64.304 kg and NO<sub>x</sub> – 177.130 kg. In 2017, 46 t of greenhouse gases (CO<sub>2</sub>) were released into the air from the operation of the facilities combusting gaseous and liquid fuels. Compared to the year 2017 when the level of 2,607 t was achieved, the amount of CO<sub>2</sub> emissions markedly decreased and returned to average annual levels from the preceding years.

In 2017, the air pollution sources were only operated in the emergency mode (no steady operation occurred). All the specified limits and conditions were complied with during the operation of the above mentioned air pollution sources during the year 2017.

### Waste Management System

In 2017, the total amount of inactive waste produced within BIDSF projects, as well as off them, represented 5,574.06 t. Out of that: 207.31 t (3.72 %) were recovered and 5,366.75 t (96.28 %) were disposed.

The total volume of produced waste was made up of the following categories:

- other waste in the amount of 114.13 t off BIDSF projects and 1,023.14 t within BIDSF projects,
- hazardous waste in the amount of 18.19 t off BIDSF projects and 4,418.60 t within BIDSF projects
- municipal and biodegradable waste in the amount of 42.60 t.

Compared to the year 2016, the waste production is markedly higher due to the commencing of D3.1B project “Dismantling and Demolition of V1 NPP Cooling Towers” implementation. The project is implemented within Stage II of the V1 NPP decommissioning which represents the performance of the Decision by the Government of SR on the definitive Bohunice V1 NPP decommissioning of September 1999.

In 2017, costs spent to dispose and recover wastes off BIDSF projects represent the amount of €67,440.80. Sales of metallic recoverable materials provided by the Sales and Contract Support Department brought the total revenue of € 341,204.30. In 2017, the waste management was performed in compliance with legal requirements of the Slovak Republic and internal company procedures.

### Environmental Impact Assessment

During the year 2017, permission proceedings were performed for activities assessed in compliance with the Act on Environmental Impact for which the compliance of the implementation of the activities was proved, while the final position from the assessment process was specified after the written evaluation of condition for the final position. Binding positions of the Ministry of Environment of the Slovak Republic were issued in relation to applications for the permission. The binding positions were used as background documents for the NRA SR decisions for the following activities:

- Integral Radioactive Waste Storage (BIDSF C8) – permission to use the construction and permission to operate the nuclear facility and to manage radioactive waste in the IRAWS nuclear facility,
- Very Low-Level Radioactive Waste Repository Mochovce (BIDSF C9.4) – permission to use the construction,
- Metallic RAW Melting Facility (BIDSF C7-A4) – building permission,
- Dismantling and Demolition of V1 NPP Cooling Towers (BIDSF D3.1B) – permission to remove the construction,
- Auxiliary Buildings System Removal – Stage I (BIDSF D4.4A) – permission to remove the construction.

In order to implement BIDSF D4.1 project “Modification of the Plant and Installation of New Equipment”, notifications of change in the proposed activity were prepared for individual partial implementation designs. Post-project analyses are performed for operated activities which, along with evaluations of the compliance with conditions specified in binding positions of the Ministry of Environment of the Slovak Republic, prove that all the assessed activities are performed by JAVYS, a.s., in compliance with the act on environmental impact assessment and with decisions issued in compliance with the act.



## INTERNATIONAL ACTIVITIES

In 2017, JAVYS, joint stock company (JAVYS, a.s.), continued the implementation of six commercial projects within the meaning of signed contracts, as well as the successful extension of its commercial activities.

JAVYS, a.s., provided the treatment of RAW from the Dukovany NPP and Temelín NPP for ČEZ, a. s., company in the form of combustion and high-pressure compaction. Moreover, preparatory activities for the processing of saturated sorbents and sludge from the Italian Caorso NPP implemented within a consortium with the Italian company Ansaldo New Clear.

The project manager approved the operating documentation developed by JAVYS, a.s., under a consultancy project for the construction of a low-level and medium-level radioactive wastes in Iraq. The project is solved along with two German companies Nukem Technologies GmbH and DBE Technology GmbH.

JAVYS, a.s., provided support to technical and emergency groups of DMS, s.r.o., company during the fresh nuclear fuel imports into the Slovak Republic for the operated nuclear power plants. JAVYS, a.s., ensured support to the Russian company Isotop in the licensing process for transports of ionizing radiation sources.

The financial volume for the contracted JAVYS, a.s., performance within the implemented projects amounts to €30.42 million and the total value of the projects amounts to €43.35 million. In compliance with the approved strategy of preparations and implementation of JAVYS, a.s., commercial activities, a Memorandum of Understanding was signed with the Croatia company Ekenerg.

Possibilities of mutual cooperation with companies Asteralis (the processing of IRAW from research institutions and the participation in a repeated tender for the processing of RAW from Cernavoda NPP), IDOM (a repository for Kozloduj, a consortium for the Garoña NPP decommissioning), with Belorussian power engineering sector representatives (RAW management and the decommissioning of nuclear facilities) and with Finnish company Fortum representatives (V1 NPP decommissioning experience for the Loviisa NPP, RAW combustion) were analysed.

JAVYS, a.s., followed-up the positive trend of extending its commercial activities by means of two projects. A new contract was concluded for a pilot project of IRAW processing for the German company Eckert & Ziegler that includes a high potential for the prolongation of its implementation in the future time period as well. The other project relates to consultancy concerning the processing centre modernization for SERAW, Kozloduj financed by the European Bank for the Reconstruction and Development funds. It was the IDOM-JAVYS-ATP consortium that succeeded to win the tender, while it was the first and successful bid in a tender for JAVYS, a.s., in compliance with European bank rules. Both the new projects represent not only a benefit of increased sales for JAVYS, a.s., but also a reference for the future and a professional development opportunity for staff members participating in their implementation. In addition to a demand by foreign companies for services actually offered by JAVYS, a.s., there was an increasing interest in additional services in the RAW management area. The extension of offered services will contribute to the company development and establishment in the market in the important nuclear industry segment.



## ECONOMIC RESULTS

### Report on Business Activities and Balance of Assets

Jadrová a vyrábacia spoločnosť, a.s., is a joint stock company with the 100 % ownership of the state that exercises its shareholder rights by means of the Ministry of Economy of the Slovak Republic.

The JAVYS, a.s., mission is to perform activities within the meaning of the approved National Strategy and National Policy of the Slovak Republic for the RAW and SNF management, namely to decommission A1 NPP and V1 NPP in a safe, reliable and economically effective manner, to provide nuclear services in the areas of management of spent nuclear fuel, radioactive waste and institutional radioactive waste by means of optimum use of existing processing capacities of RAW PTT and to perform related activities. JAVYS, a.s., provides additional services to third parties resulting from concluded servicing and lease contracts.

Since July 2016, JAVYS, a.s., has been included in the public administration sector and its business activities are also affected by relevant legal regulations in force in that area.

As to 31 December 2017, the company achieved the economic outturn before tax amounting to €11,838,270 and the economic outturn after tax amounting to €7,701,168. The operating economic outturn was reported in the amount of €11,550,535.

In 2017, the main JAVYS, a.s., activities were covered financially by provided NNF funds, by provided BIDSF funds and by revenue and returns received due to economic activities.

Within the meaning of the contract with the NNF, the maximum and limit amount of financial resources for individual applications was determined to €68,533,250 for the year 2017. The drawing of NNF operating funds: for the performance in 2017 amounted to €55,101,607 (from the 2017 budget: €53,767,417 and from the 2018 budget: €1,334,190) and for investments in 2017 amounted to €6,779,917 from the 2017 budget. It remains to draw €6,638 of operating funds from the 2018 budget for the performance provided in 2017. Within the meaning of the

contract with NNF for 2018, investment funds amounting to €1,012,794 were drawn from the 2018 budget for the performance in 2017 and it remains to draw investment funds amounting to €55,128 for the performance provided in 2017.

Based on the drawing of BIDSF funds for projects related to the V1 NPP decommissioning, JAVYS, a.s., received a sum in the total amount of €33,621,655 in 2017, out of which the operating part represented €20,130,728 and the investment part represented €13,490,927. Out of that: funds for the decommissioning programme implementation using human resources available at the V1 NPP, BIDSF project D0, amounted to €6,493,069, out of which €6,385,468 for the operating part and €107,601 for the investment part.

Company revenue and returns from commercial activities include revenue and returns from the commercial RAW and SNF management, other revenue from the concluded servicing and lease contracts and revenue from sales of recoverable unnecessary assets from the A1 NPP and V1 NPP decommissioning. The company reported total revenue and returns on its own performance amounting to €26,653,443 for the year 2017, out of which immediate revenue from the RAW transport, storage and processing and from the SNF management for the V1 NPP, V2 NPP and EMO1,2 NPP amounted to €17,861,217 and the servicing provided to third parties represented an amount of €821,534. The reported revenue from the processing of sludge coming from the V1 NPP Bioclar sludge tanks amounted to €2,263,883. Revenues amounting to €5,706,809 were achieved by the company from the activation of materials and LTA worth €1,931,986 and from revenue achieved by sales of recoverable unnecessary assets from the A1 NPP and V1 NPP decommissioning amounting to €3,774,823 and from revenue resulting from lease and other contracts and other performance by JAVYS, a.s.

In 2017, company intermediary consumption costs were reported in the amount of €45,028,906. Actual personnel costs were reported in the amount of €26,578,665 (out of which the sum of €24,533,562 represented labour costs and the sum of €1,968,238 corresponds to the settlement of a reserve for staff benefits from the year 2016 and to the completion of a reserve for future staff benefits), book depreciations of fixed assets and provisions to the fixed assets amounted to €18,086,658 (total LIA and LTA depreciations amounted to €22,559,472 and provisions to the assets amounted to €4,472,814).

As to 31 December 2017, the company registered total assets in the amount



of €1,464,770,382. Out of that, long-term intangible assets represented an amount of €2,215,768 and the company long-term tangible assets represented an amount of €152,443,623. Long-term financial assets were reported in the amount of €108,056,592. The assets are related to the capital contribution to JESS company that was founded in 2009 as a joint venture of JAVYS, a.s., and ČEZ Bohunice companies. As to 31 December 2017, the value of the financial assets was revaluated on the basis of the deduction from JESS company equity by €1,455,657.

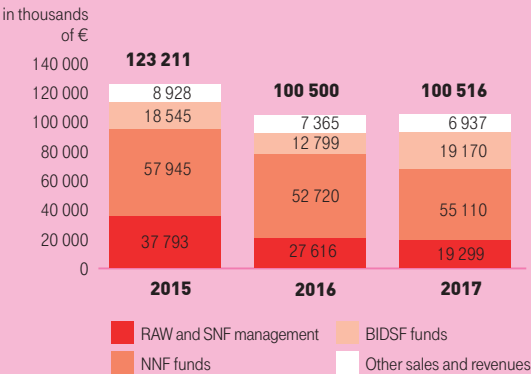
As to 31 December 2017, the greatest item of company liabilities included reserves created for the decommissioning and disposal of A1 and V1 Nuclear Power Plants, reserves created for the decommissioning and disposal of non-power facilities and reserves for future staff benefits (retirement allowances and severance payments

within the meaning of the Collective Agreement). As to 31 December 2017, the reserves were reported in the total amount of €1,095,868,593. A part of the reserves is represented by reserves for the A1 and V1 Nuclear Power Plants decommissioning, amounting to €956,614,158. This part of reserves is covered by receivables towards NNF and BIDSF.

As to 31 December 2017, the company equity value achieved the amount of €228,275,914 which represents 15.58 % out of the total company assets. The achieved economic results are given in the financial statements that were audited by an independent auditor without any reservations.

### Structure of operational sales and revenues according to sources of financial coverage

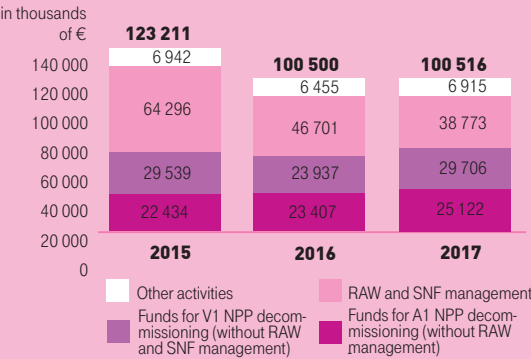
	in thousands of €		
	2015	2016	2017
RAW and SNF management	37 793	27 616	19 299
NNF funds	57 945	52 720	55 110
BIDSF funds	18 545	12 799	19 170
Other sales and revenues	8 928	7 365	6 937
<b>Total:</b>	<b>123 211</b>	<b>100 500</b>	<b>100 516</b>



### Structure of operational sales and revenues according to activities

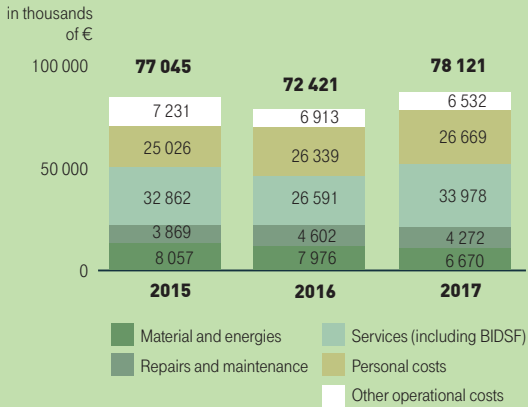
The NNF funds also include the funds provided for reimbursement of the costs for RAW management from A1 NPP and V1 NPP decommissioning and the costs for SNF storage from V1 NPP.

	in thousands of €		
	2015	2016	2017
Funds for A1 NPP decommissioning (without RAW management)	22 434	23 407	25 122
Funds for V1 NPP decommissioning (without RAW and SNF management)	29 539	23 937	29 706
RAW and SNF management	64 296	46 701	38 773
Other activities	6 942	6 455	6 915
<b>Total:</b>	<b>123 211</b>	<b>100 500</b>	<b>100 516</b>



### Operational costs structure

	in thousands of €		
	2015	2016	2017
Material and energies	8 057	7 976	6 670
Repairs and maintenance	3 869	4 602	4 272
Services (including BIDSF)	32 862	26 591	33 978
Personal costs	25 026	26 339	26 669
Other operational costs	7 231	6 913	6 532
<b>Total:</b>	<b>77 045</b>	<b>72 421</b>	<b>78 121</b>

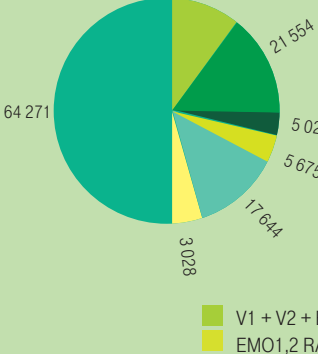


### Sales for nuclear services

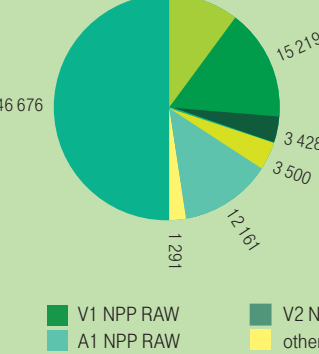
RAW management of V1 NPP also includes revenues from management of historical sludges and sorbents and historical RAW from Bioclar sludge fields of V1 NPP.

	in thousands of €		
	2015	2016	2017
V1 + V2 + EMO1,2 SNF	11 343	11 077	10 643
V1 NPP RAW	21 554	15 219	7 627
V2 NPP RAW	5 027	3 428	3 264
EMO1,2 RAW	5 675	3 500	4 794
A1 NPP RAW	17 644	12 161	12 041
other RAW	3 028	1 291	1 514
<b>Total:</b>	<b>64 271</b>	<b>46 676</b>	<b>39 883</b>

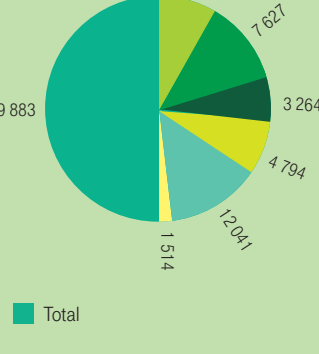
### Sales for nuclear services in 2015



### Sales for nuclear services in 2016

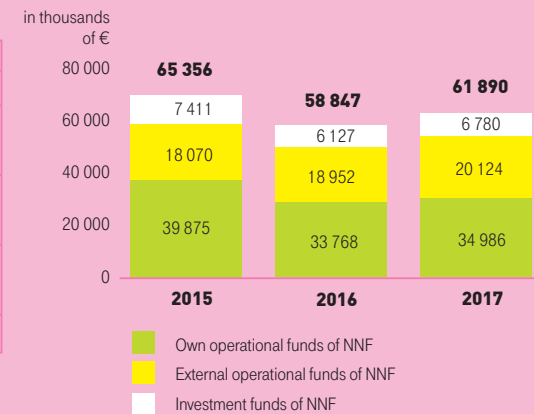


### Sales for nuclear services in 2017



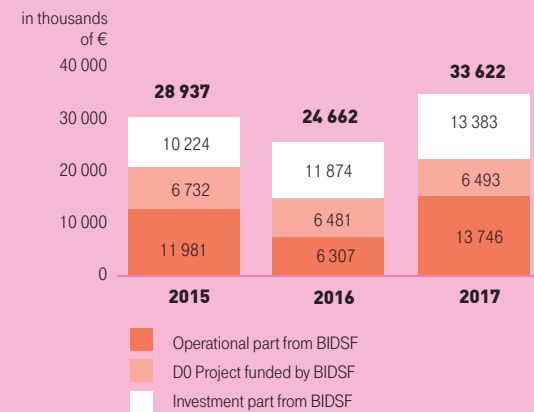
## Funds from NNF

in thousands of €			
	2015	2016	2017
Own operational funds of NNF	39 875	33 768	34 986
External operational funds of NNF	18 070	18 952	20 124
Investment funds of NNF	7 411	6 127	6 780
<b>Total:</b>	<b>65 356</b>	<b>58 847</b>	<b>61 890</b>



## Funds from BIDSF

in thousands of €			
	2015	2016	2017
Operational part from BIDSF	11 981	6 307	13 746
D0 Project funded by BIDSF	6 732	6 481	6 493
Investment part from BIDSF	10 224	11 874	13 383
<b>Total:</b>	<b>28 937</b>	<b>24 662</b>	<b>33 622</b>



## Trade and Services

In 2017, the active JAVYS, a.s., trading was oriented, above all, to the following areas.

- **Provision of services in the areas of radioactive waste management and spent nuclear fuel management.**

The provision of services in the areas of radioactive waste processing and storage and the spent nuclear fuel management is, above all, the subject of a business relationship with SE, a. s., and ČEZ, a. s., companies.

- **Provision of services and other activities necessary to ensure nuclear safety, radiation protection and operational reliability.**

JAVYS, a.s. provides services that are inevitable to ensure the safe operation of nuclear power plants and are related, above all, to the staff training for nuclear power facilities, personal health physics and radiation protection, equipment calibration, services related to the common use of facilities, services in the area of emergency planning and preparedness, transportation services, the steam supply and the leasing of non-residential premises and facilities to SE, a. s.

- **Non-residential property management services, provision of services related to the leasing of immovable property and non-residential premises. The leasing of apartments and non-residential premises.**

The leasing of immovable property and non-residential premises is provided on a commercial basis, mainly to current contractors of works and services to JAVYS, a.s., but also to subjects without any supply relationship to JAVYS, a.s.

The leased immovable property is used primarily as offices, changing rooms, warehouses, assembly halls, production workshops, apartments, or, pieces of land and parking lots are leased.

- **Provision of other services and the sale of unnecessary property.**

Within its commercial activities, JAVYS, a.s., also provides other services, in particular: the collection, transportation, processing and storage of IRAW, the common use of the railway siding, the provision of training and consultancy, health physics services, demineralized water supplies, water and drainage fees, heat, electricity, provision of personal protective equipment, etc.

Sales of unnecessary and unusable properties were also a source of revenue. In 2017, 17 cases of sales of recoverable materials, unnecessary property and unnecessary stock were performed (completed) which brought revenue in the total amount of €667,141.95 (without VAT).

Summary revenue from the main commercial activities for the year 2017 amounted to €22,077,000. Out of that, revenue for RAW and SNF management services accounted approximately for 78 % and revenue for other services accounted for 22 %.






UZPODv14\_3

Balance Sheet  
Úč POD 1 - 01

DIČ 2022036599

IČO 35946024



Description a	ASSETS b	Line c	Current Reporting Period										Immediately-Preceding Reporting Period											
			Gross - Part 1					Net 2					Net 3											
			1	Correction - Part 2																				
4.	Perennial crops (025) - /085, 092A/	15																						
5.	Livestock and draught animals (026) - /086, 092A/	16																						
6.	Other non-current tangible assets (029, 02X, 032) - /089, 08X, 092A/	17				2	8	9	2	5			1	2	4	9	4							
7.	Non-current tangible assets in acquisition (042) - 094	18				3	2	5	7	3	9	3	2			1	2	4	9	4				
8.	Advance payments for non-current tangible assets (052) - /095A/	19				5	9	1	8	3	0			5	9	1	8	3	0					
9.	Correction item to acquired assets (+/- 097) +/- 098	20														1	7	0	7	6	2	1		
A.III.	Total non-current financial assets (I. 22 to I. 32)	21				1	0	8	0	5	6	5	9	2		1	0	8	0	5	6	5	9	2
A.III.1.	Shares and ownership interests in group companies (061A, 062A, 063A) - /096A/	22														1	0	9	5	1	2	2	4	9
2.	Shares and ownership interests with a participating interest except for group companies (062A) - /096A/	23				1	0	8	0	5	6	5	9	2		1	0	8	0	5	6	5	9	2
3.	Other held-for-sale securities and ownership interests (063A) - /096A/	24														1	0	9	5	1	2	2	4	9
4.	Loans to group companies (066A) - /096A/	25																						
5.	Loans within a participating interest except to group companies (066A) - /096A/	26																						
6.	Other loans (067A) - /096A/	27																						
7.	Debt securities and other non-current financial assets (065A, 069A, 06XA) - /096A/	28																						

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UZPODv14\_4

Balance Sheet  
Úč POD 1 - 01

DIČ 2022036599

IČO 35946024



Description a	ASSETS b	Line c	Current Reporting Period										Immediately-Preceding Reporting Period																	
			Gross - Part 1					Net 2					Net 3																	
			1	Correction - Part 2																										
8.	Loans and other non-current financial assets with remaining maturity of up to one year (066A, 067A, 069A, 06XA) - /096A/	29																												
9.	Bank accounts bound for period exceeding one year (22XA)	30																												
10.	Non-current financial assets in acquisition (043) - /096A/	31																												
11.	Advance payments for non-current financial assets (053) - /095A/	32																												
B.	Current assets (I. 34 + I. 41 + I. 53 + I. 66 + I. 71)	33				1	1	9	8	3	1	0	3	2	4					1	1	9	8	3	0	3	1	5	2	
B.I.	Total inventory (I. 35 to I. 40)	34										7	1	7	2					1	2	4	4	7	2	2	8	6	3	
B.I.1.	Raw materials (112, 119, 11X) - /191, 19X/	35				1	3	5	0	3	2	1								1	3	5	0	3	2	1				
2.	Work-in-progress and semi-finished goods (121, 122, 12X) - /192, 193, 19X/	36																		1	4	5	7	7	2	3				
3.	Finished goods (123) - 194	37																												
4.	Livestock (124) - 195	38																												
5.	Merchandise (132, 133, 13X, 139) - /196, 19X/	39																												
6.	Advance payments for inventory (314A) - /391A/	40																												
B.II.	Total non-current receivables (I. 42 + I. 46 to I. 52)	41				3	3	8	5	3	7	8								3	3	8	5	3	7	8				
B.II.1	Total trade receivables (I. 43 to I. 45)	42																		3	9	3	8	9	1	4				

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DIČ	2	0	2	2	0	3	6	5	9	9
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ICÖ	3	5	9	4	6	0	2	4
-----	---	---	---	---	---	---	---	---

[illegible]

DIČ	2	0	2	2	0	3	6	5	9	9
-----	---	---	---	---	---	---	---	---	---	---

ICÖ	3	5	9	4	6	0	2	4
-----	---	---	---	---	---	---	---	---

[illegible]

UZPODv14\_7

Balance Sheet  
Úč POD 1 - 01

DIČ 2 0 2 2 0 3 6 5 9 9

IČO 3 5 9 4 6 0 2 4

Descripti  
on  
a

ASSETS  
b

Line  
c

Current Reporting Period

1

Gross - Part 1

Correction - Part 2

Net 3

Immediately-Preceding Reporting Period

Net 3

B.V.

Financial accounts I. 72 + I. 73

71

2 1 5 1 8 7 6 2 5

2 1 5 1 8 7 6 2 5

2 0 6 9 3 1 6 1 6

B.V.1.

Cash on hand (211, 213, 21X)

72

1 1 3 3 5

1 1 3 3 5

6 6 0 9 8

2.

Bank accounts (221A, 22X, +/- 261)

73

2 1 5 1 7 6 2 9 0

2 1 5 1 7 6 2 9 0

2 0 6 8 6 5 5 1 8

C.

Total accruals and deferrals (I. 75 to I. 78)

74

3 7 5 1 2 4 8

3 7 5 1 2 4 8

2 3 9 9 9 6 4

C.1.

Non-current deferred expenses (381A, 382A)

75

1 3 5 3 0 4

1 3 5 3 0 4

1 3 5 3 0 4

2.

Current deferred expenses (381A, 382A)

76

2 1 7 4 1 5

2 1 7 4 1 5

2 4 8 9 2 1

3.

Non-current accrued income (385A)

77

4.

Current accrued income (385A)

78

3 3 9 8 5 2 9

3 3 9 8 5 2 9

2 0 1 5 7 3 9

Descripti  
on  
a

EQUITY AND LIABILITIES  
b

Line  
c

Current Reporting Period

4

Immediately-Preceding Reporting Period

5

TOTAL EQUITY AND LIABILITIES I. 80 + I. 101 + I. 141

79

1 4 6 4 7 7 0 3 8 2

1 5 0 6 8 7 9 9 2 8

A.

Equity I. 80 + I. 85 + I. 86 + I. 87 + I. 90 + I. 93 + I. 97 + I. 100

80

2 2 8 2 7 5 9 1 2

2 2 8 0 7 4 5 9 0

A.I.

Total registered capital (I. 82 to I. 84)

81

3 6 4 4 6 9 4 0

3 6 4 4 6 9 4 0

A.I.1.

Registered capital (411 or +/- 491)

82

3 6 4 4 6 9 4 0

3 6 4 4 6 9 4 0

2.

Changes in the registered capital +/- 419

83

3.

Receivables for subscribed capital (/-/353)

84

A.II.

Share premium (412)

85

A.III.

Other capital funds (413)

86

A.IV.

Legal reserve funds I. 88 + I. 89

87

8 4 2 2 6 8 4

8 4 2 2 6 8 5

A.IV.1.

Legal reserve fund and non-distributable fund (417A, 418, 421A, 422)

88

8 4 2 2 6 8 4

8 4 2 2 6 8 5

2.

Reserve fund for treasury stock and treasury shares (417A, 421A)

89

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UZPODv14\_8

Balance Sheet  
Úč POD 1 - 01

DIČ 2 0 2 2 0 3 6 5 9 9

IČO 3 5 9 4 6 0 2 4

Descripti  
on  
a

EQUITY AND LIABILITIES  
b

Line  
c

Current Reporting Period

4

Immediately-Preceding Reporting Period

5

A.V.

Other funds from profit I. 91 + I. 92

90

3 4 7 3 7 3 5 7

3 1 8 2 1 0 4 1

A.V.1.

Statutory funds (427, 42X)

91

2.

Other funds (427, 42X)

92

3 4 7 3 7 3 5 7

3 1 8 2 1 0 4 1

A.VI.

Total revaluation reserves (I. 94 to I. 96)

93

1 0 1 7 7 1 6 1 5

1 0 3 2 2 7 2 7 3

A.VI.1.

Asset and liability revaluation reserve (+/- 414)

94

- 1 3 3 1 9 6 8 5

- 1 1 8 6 4 0 2 8

2.

Financial investments revaluation reserve (+/- 415)

95

1 1 5 0 9 1 3 0 0

1 1 5 0 9 1 3 0 1

3.

Revaluation reserve from fusions, mergers and separations (+/- 416)

96

A.VII.

Profit/loss from previous years I. 98 + I. 99

97

3 9 1 9 6 1 4 8

3 5 2 5 4 0 3 1

A.VII.1.

Retained earnings from previous years (428)

98

3 9 1 9 6 1 4 8

3 5 2 5 4 0 3 1

2.

Accumulated losses from previous years (/-/429)

99

A.VIII.

Profit/loss for the current reporting period after taxation +/- I. 01 - (I. 81 + I. 85 + I. 86 + I. 87 + I. 90 + I. 93 + I. 97 + I. 101 + I. 141)

100

7 7 0 1 1 6 8

1 2 9 0 2 6 2 0

B.

Liabilities I. 102 + I. 118 + I. 121 + I. 122 + I. 136 + I. 139 + I. 140

101

1 1 2 4 1 6 9 7 2 0

1 1 7 7 7 2 9 1 0 6

B.I.

Total non-current liabilities (I. 103 + I. 107 to I. 117)

102

9 1 0 7 2 2 6

1 1 3 1 9 9 9 6

B.I.1.

Total long-term trade payables (I. 104 to I. 106)

103

1.a

Trade payables to group companies (321A, 475A, 476A)

104

1.b

Trade payables within a participating interest except for payables to group companies (321A, 475A, 476A)

105

1.c

Other trade payables (321A, 475A, 476A)

106

2.

Net construction contract value (316A)

107

8 6 0 1 2 3 1

1 0 8 6 5 1 1 3

3.

Other payables to group companies (471A, 47XA)

108

4.

Other payables within a participating interest except for payables to group companies (471A, 47XA)

109

5.

Other long-term payables (479A, 47XA)

110

6.

Long-term advance payments received (475A)

111

7.

Long-term bills of exchange to be paid (478A)

112

8.

Bonds issued (473A/-/255A)

113

9.

Social fund payables (472)

114

5 0 5 9 9 5

4 5 4 8 8 3

10.

Other non-current payables (336A, 372A, 474A, 47XA)

115

11.

Long-term payables from derivative transactions (373A, 377A)

116

12.

Deferred tax liability (481A)

117

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UZPODv14\_9

Balance Sheet  
(Úč POD 1-01)

DIČ 2 0 2 2 0 3 6 5 9 9

IČO 3 5 9 4 6 0 2 4



Description a	EQUITY AND LIABILITIES b	Line c	Current Reporting Period 4										Immediately-Preceding Reporting Period 5									
			1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0
B.II.	Long-term provisions for liabilities I. 119 + I. 120	118		9	7	9	8	6	7	1	7	9	1	0	5	1	4	5	6	9	1	0
B.II.1.	Legal provisions for liabilities (451A)	119																				
2.	Other provisions for liabilities (459A, 45XA)	120		9	7	9	8	6	7	1	7	9	1	0	5	1	4	5	6	9	1	0
B.III.	Long-term bank loans (461A, 46XA)	121																				
B.IV.	Total current liabilities (I. 123 + I. 127 to I. 135)	122		1	9	1	9	2	2	9	8		1	6	5	8	3	8	8	8		
B.IV.1	Total trade payables (I. 124 to I. 126)	123		1	5	6	3	9	4	2	9		1	3	4	9	8	4	5	1		
1.a.	Trade payables to group companies (321A, 322A, 324A, 325A, 326A, 32XA, 475A, 476A, 478A, 47XA)	124			6	2	3	9	2	5			1	6	5	0	2	5				
1.b.	Trade payables within a participating interest except for payables to group companies (321A, 322A, 324A, 325A, 32XA, 475A, 476A, 478A, 47XA)	125																				
1.c.	Other trade payables (321A, 322A, 324A, 325A, 326A, 32XA, 475A, 476A, 478A, 47XA)	126		1	5	0	1	5	5	0	4		1	3	3	3	3	4	2	6		
2.	Net construction contract value (316A)	127																				
3.	Other payables to group companies (361A, 36XA, 471A, 47XA)	128																				
4.	Other payables within a participating interest except for payables to group companies (361A, 36XA, 471A, 47XA)	129																				
5.	Payables to partners and participants in an association (364, 365, 366, 367, 368, 398A, 478A, 479A)	130																				
6.	Payables to employees (331, 333, 33X, 479A)	131			1	2	3	7	1	7	3		1	3	5	5	0	9	2			
7.	Social security insurance payables (336A)	132			8	4	6	3	1	5			8	4	9	2	1	0				
8.	Tax liabilities and subsidies (341, 342, 343, 345, 346, 347, 34X)	133			2	5	5	3	1	1			2	9	3	0	6	7				
9.	Payables from derivative transactions (373A, 377A)	134																				
10.	Other payables (372A, 379A, 474A, 475A, 479A, 47XA)	135			1	2	1	4	0	7	0			5	8	8	0	6	8			
B.V.	Short-term provisions for liabilities I. 137 + I. 138	136		1	1	6	0	0	1	4	1	4	9	8	3	6	7	8	9	1		
B.V.1.	Legal provisions for liabilities (323A, 451A)	137			2	6	6	9	5	6	1			6	5	6	7	8	8			
2.	Other provisions for liabilities (323A, 32X, 459A, 45XA)	138		1	1	3	3	3	1	8	5	3	9	7	7	1	1	1	0	3		
B.VI.	Current bank loans (221A, 231, 232, 23X, 461A, 46XA)	139					1	6	0	3								4	2	1		
B.VII.	Short-term financial assistance (241, 249, 24X, 473A, I-/255A)	140																				
C.	Total accruals and deferrals (I. 142 to I. 145)	141		1	1	2	3	2	4	7	5	0	1	0	1	0	7	6	2	3	2	
C.1.	Non-current accrued expenses (383A)	142																				
2.	Current accrued expenses (383A)	143						5	6	1								3	7	0		
3.	Non-current deferred income (384A)	144		9	9	9	7	4	7	2	6		9	1	6	7	7	2	7	2		
4.	Current deferred income (384A)	145		1	2	3	4	9	4	6	3		9	3	9	8	5	9	0			

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Income Statement  
Úč POD 2 - 01

DIČ 2 0 2 2 0 3 6 5 9 9 IČO 3 5 9 4 6 0 2 4



Description on a	Item b	Line c	Actual																						
			Current Reporting Period 1										Immediately-Preceding Reporting Period 2												
			1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0			
.	Net turnover (a portion of Accounting Class 6 under the Act)	01			2	4	0	5	4	3	1	5			3	3	1	9	6	1	7	7			
**	Total operating revenues (I. 03 to I. 09)	02			1	4	1	0	9	4	9	2	2			1	3	0	7	2	2	6	1	8	
I.	Revenues from the sale of merchandise (604, 607)	03																							
II.	Revenues from the sale of own products (601)	04							3	6	3	3	3						3	6	1	7	5		
III.	Revenues from the sale of services (602, 606)	05				2	4	0	1	7	9	8	2			3	3	1	6	0	0	0	2		
IV.	Changes in inventories (+/- Accounting Group 61)	06																							
V.	Own work capitalised (Accounting Group 62)	07					1	9	3	1	9	8	6				2	0	4	4	1	5	5		
VI.	Revenues from the sale of non-current intangible assets, non-current tangible assets and raw materials (641, 642)	08					6	6	7	1	4	2					1	8	6	1	8	1			
VII.	Other operating revenues (644, 645, 646, 648, 655, 657)	09				1	1	4	4	4	1	4	7	9			9	5	2	9	6	1	0	5	
**	Total operating expenses (I. 11 + I. 12 + I. 13 + I. 14 + I. 15 + I. 20 + I. 21 + I. 24 + I. 25 + I. 26)	10				1	2	9	5	4	4	3	8	7			1	1	3	1	5	6	4	9	3
A.	Costs of the acquisition of merchandise sold (504, 507)	11																							
B.	Consumed raw materials, energy and other non-inventory supplies (501, 502, 503)	12					6	6	7	0	5	2	2				7	9	7	5	9	3	1		
C.	Provisions for inventories (+/-) (505)	13																							
D.	Services (Accounting Group 51)	14					3	8	3	5	8	3	8	3			3	1	3	3	9	5	4	6	
E.	Total personnel expenses (I. 16 to I. 19)	15					2	6	5	7	8	6	6	5			2	7	1	2	7	7	6	9	
E.1.	Wages and salaries (521, 522)	16					1	7	5	0	9	9	0	9			1	7	1	0	9	9	1	3	
2.	Remuneration of members of company bodies and co-operative (523)	17						3	0	8	8	3	4					2	6	5	1	8	4		
3.	Social insurance expenses (524, 525, 526)	18						7	3	7	6	1	3	9				7	2	2	8	4	5	1	
4.	Social expenses (527, 528)	19						1	3	8	3	7	8	3				2	5	2	4	2	2	1	
F.	Taxes and fees (Accounting Group 53)	20						2	5	3	2	3	5	6				2	5	7	1	2	6	0	
G.	Amortisation and depreciation, and provisions for non-current intangible and non-current tangible assets (I. 22 + I. 23)	21						1	8	0	8	6	6	5	9			1	5	5	0	2	2	2	9
G.1.	Amortisation and depreciation of non-current intangible and non-current tangible assets (551)	22						2	2	5	5	9	4	7	3			2	0	8	1	1	6	1	6
2.	Provisions for non-current intangible and non-current tangible assets (+/-) (553)	23						-	4	4	7	2	8	1	4			-	5	3	0	9	3	8	7
H.	Net book value of non-current assets and raw materials sold (541, 542)	24																				8	4	0	
I.	Provisions for receivables (+/-) (547)	25										-	5	0				-	2	2	0	1			
J.	Other operating expenses (543, 544, 545, 546, 548, 549, 555, 557)	26						3	7	3	1	7	8	5	2			2	8	6	4	1	1	1	9
***	Operating profit or loss (+/-) (I. 02 - I. 10)	27						1	1	5	5	0	5	3	5			1	7	5	6	6	1	2	5

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Income Statement  
Úč POD 2 - 01

DIČ 2 0 2 2 0 3 6 5 9 9

IČO 3 5 9 4 6 0 2 4



Description on a	Item b	Line c	Actual																						
			Current Reporting Period										Immediately-Preceding Reporting Period												
			1										2												
.	Added value (I. 03 + I. 04 + I. 05 + I. 06 + I. 07) - (I. 11 + I. 12 + I. 13 + I. 14)	28			-	1	9	0	4	2	6	0	4			-	4	0	7	5	1	4	5		
..	Total revenues from financing activities (I. 30 + I. 31 + I. 35 + I. 39 + I. 42 + I. 43 + I. 44)	29							2	8	9	4	9	8				8	0	8	9	3	3		
VIII.	Revenues from the sale of securities and ownership interests (661)	30																							
IX.	Total revenues from non-current financial assets (I. 32 to I. 34)	31																							
IX.1.	Revenues from securities and ownership interests from group companies (665A)	32																							
2.	Revenues from securities and ownership interests within a participating interest except for revenues from group companies (665A)	33																							
3.	Other revenues from securities and ownership interests (665A)	34																							
X.	Total revenues from current financial assets (I. 36 to I. 38)	35																							
X.1.	Revenues from current financial assets from group companies (666A)	36																							
2.	Revenues from current financial assets within a participating interest except for revenues from group companies (666A)	37																							
3.	Other revenues from current financial assets (666A)	38																							
XI.	Interest income (I. 40 + I. 41)	39							2	8	9	4	7	4				8	0	8	9	2	7		
XI.1.	Interest income from group companies (662A)	40																							
2.	Other interest income (662A)	41							2	8	9	4	7	4				8	0	8	9	2	7		
XII.	Foreign exchange gains (663)	42										2	4										6		
XIII.	Gains on revaluation of securities and revenues from derivative transactions (664, 667)	43																							
XIV.	Other revenues from financing activities (668)	44																							
..	Total costs of financing activities (I. 46 + I. 47 + I. 48 + I. 49 + I. 52 + I. 52 + I. 53 + I. 54)	45								1	7	6	3						2	2	3	5			
K.	Securities and ownership interests sold (561)	46																							
L.	Expenses related to current financial assets (566)	47																							
M.	Provisions for financial assets (+/-) (565)	48																							
N.	Interest expense (I. 50 + I. 51)	49																							
N.1.	Interest expense for group companies (562A)	50																							
2.	Other interest expense (562A)	51																							
O.	Foreign exchange losses (563)	52								1	6	9									3	0	3		
P.	Expenses for revaluation of securities and expenses related to derivative transactions (564, 567)	53																							
Q.	Other costs of financing activities (568, 569)	54								1	5	9	4									1	9	3	2

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Income Statement  
Úč POD 2 - 01

DIČ 2 0 2 2 0 3 6 5 9 9

IČO 3 5 9 4 6 0 2 4



Description a	Item b	Line c	Actual																																
			Current Reporting Period												Immediately-Preceding Reporting Period																				
			1												2																				
...	Profit/loss from financing activities (+/-) (I. 29 - I. 45)	55				2	8	7	7	3	5				8	0	6	6	9	8															
....	Profit/loss for the reporting period before taxation (+/-) (I. 27 + I. 55)	56			1	1	8	3	8	2	7	0			1	8	3	7	2	8	2	3													
R.	Income tax (I. 58 + I. 59)	57			4	1	3	7	1	0	2				5	4	7	0	2	0	3														
R.1.	Current income tax (591, 595)	58			3	5	8	3	6	3	3				5	4	7	0	2	0	3														
2.	Deferred income tax (+/-) (592)	59			5	5	3	4	6	9																									
S.	Profit/loss of partnership transferred to partners (+/- 596)	60																																	
...	Profit/loss for the reporting period after taxation (+/-) (I. 56 - I. 57 - I. 60)	61			7	7	0	1	1	6	8				1	2	9	0	2	6	2	0													

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VAT No.: SK2020325516

Jadrová a vyradovacia spolocnost', a.s.

INDEPENDENT AUDITOR ´S REPORT

To the Shareholder, the Supervisory Board and the Board of Directors of Jadrová a vyradovacia spolocnost', a. s.:

REPORT OF THE FINACIAL STATEMENT AUDIT

Opinion

We have performed the audit of the financial statements of Jadrová a vyradovacia spolocnost', a. s. (hereinafter referred to as the "the Company"), which comprise the balance sheet as at 31 December 2017, and the profit and loss statement for the year then ended, and the notes, which include a summary of significant accounting policies and accounting methods. In our opinion, the accompanying financial statements present true and fairly image of the financial position of the company as at 31 December 2017 and its financial performance for the year then ended, in accordance with the Act No. 431/2002 Coll., on Accounting in the wording of later amendments (hereinafter referred to as "the Act on Accounting").

The basis for the opinion

We have conducted the audit in accordance with International Standards on Auditing. Our responsibility under these standards is explained in detail in the Auditor's Responsibility for the Audit of Financial Statements. We are independent from the company according to the provisions of the Act No. 423/2015 Coll. On Statutory Audit and on amendments to the Act No. 431/2002 Coll. on Accounting in the wording of later amendments (hereinafter referred to as "the Statutory Audit Act") concerning ethics, including the Auditor's Code of Ethics, which are relevant for our audit of the financial statements, and we have complied with the other requirements of these provisions related to ethics. We are convinced that the audit evidence we have obtained provides a sufficient and appropriate basis for our opinion.

Emphasise of Matter

As described in Notes III.4, IV.2 and VIII.2 to the financial statements, as at 31 December 2017, the Company used significant estimates in the recognition of provisions for liabilities and receivables from future grants in connection with the decommissioning of nuclear facilities, storage of spent nuclear fuel and radioactive waste processing based on the updated strategy for the back end of the nuclear power industry approved by the Government of the Slovak Republic in 2014. There are inherent uncertainties contained in the estimation of costs for decommissioning of nuclear facilities and related activities, which may result in significant adjustments in terms of the company's financial position and financial performance in the future. As described in Notes I.1.2 and III.2 to the financial statements, the company established a joint venture Jadrová energetická spolocnost' Slovenska, a. s., together with ČEZ Bohunice a. s., a subsidiary of ČEZ, a. s. (the major electricity producer in the Czech Republic) with the aim to build a new nuclear power plant. The future development and recoverability of the investment in the joint venture depends on the decision on the construction, which will be made in the future. Our opinion has not been modified in respect of these matters.

Statutory Body ´s Responsibility for the Financial Statements

The Statutory Body of the company is responsible for preparation of the financial statements in order to provide true and fair view in accordance with the Act on Accounting and for internal inspections which are considered by the Statutory Body to be necessary for preparation of the financial statements that are free from serious misstatement, whether due to fraud or error. At preparing the financial statements, the Statutory Body is responsible for assessing the company's ability to continually perform its business, for describing the facts related to business continuation, if necessary, and for using the assumption of business continuation at accounting, unless it intends to liquidate or terminate the business, or have no other real option than to do so.

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Auditor ´s Responsibility for the Audit of the Financial Statements

Our responsibility is to obtain reasonable assurance whether the financial statements as a whole are free from significant misstatement, whether due to fraud or error, and to issue an Auditor's Report that contains the auditor's opinion. A reasonable assurance provides a high level of assurance, but not a guarantee that an audit performed in accordance with International Standards on Auditing will always reveal any significant misstatement. Misstatements may arise as a result of fraud or error, and are considered significant if it would be reasonable to expect that individually or in aggregate they influence economic decisions taken by users on the basis of these financial statements.

As part of the audit in compliance with the International Standards on Auditing, we apply expert judgment and maintain professional scepticism throughout the audit. Besides that:

- We identify and assess the risks of significant misstatement of financial statements whether due to fraud or error, we propose and perform audit procedures that respond to those risks and we obtain audit evidence that is sufficient and appropriate to provide the basis for the opinion of the auditor. The risk of not revealing a significant misstatement due to fraud is greater than the risk due to an error, as fraud may involve a secret agreement, forgery, deliberate omission, false declaration, or avoiding of internal inspection.
- We communicate with internal audits relevant to the audit so that we can propose audit procedures that are appropriate in the circumstances but not to express an opinion on the effectiveness of internal company inspections.
- We evaluate the appropriateness of the accounting policies and accounting methods used, as well as the reasonability of the accounting estimates and related information published by the Statutory Body.
- We assume the conclusion on whether the Statutory Body appropriately applies the accounting principle of business continuation and, on the basis of the audit evidence obtained, the conclusion on whether there is significant uncertainty in relation to events or circumstances that could significantly undermine ability of the company to continue in business. If we conclude that there is a significant uncertainty, we are required to indicate in our Auditor's Report the related information contained in the financial statements or, if such disclosures are insufficient, to modify our opinion. However, our conclusions are based on audit evidence obtained by the date of issue of our Auditor's Report. Future events or circumstances may, however, cause the company to terminate the business continuation.
- We evaluate the overall presentation, structure and content of the financial statements, including published information, as well as whether the financial statements faithfully reflect the real transactions and events.

REPORT ON OTHER REQUIREMENTS OF LAWS AND OTHER LEGISLATIVE REGULATIONS

Report on the information to be included in the Annual Report

The Statutory Body is responsible for the information contained in the Annual Report prepared according to the requirements of the Act on Accounting. Our opinion on the financial statements does not apply to other information in the Annual Report. In relation to the audit of the financial statements, we are responsible getting acquainted with information contained in the Annual Report and for evaluating whether this information is not in significant discontent with the financial statements or our knowledge that we obtained during the audit of the financial statements or otherwise appear to be significantly wrong. We did not have the Annual Report available at the date of issue of the Auditor's Report on the audit of the financial statements.

Once we receive the Annual Report, we will evaluate whether the Annual Report of the company contains information required by the Act on Accounting and, based on the work performed during the audit of the financial statements, we will express the opinion whether:

- The information provided in the Annual Report compiled for the year 2017 is consistent with the financial statements for the concerned year,
- The Annual Report contains information under the Act on Accounting.

In addition, we will report whether we have identified significant misstatements in the Annual Report on the basis of our knowledge of the company and the situation we have acquired during our audit of the financial statements.

Bratislava, 21 March 2018

Deloitte Audit s.r.o.  
Licence SKAu No. 014

Ing. Ján Bobocký, FCCA  
Responsible Auditor  
Licence UDVA No. 1043

ABBREVIATIONS

ALARA	As Low As Reasonable Achievable – principle of persons' radiation exposure optimization
BIDSF	Bohunice International Decommissioning Support Fund
BRWTC	Bohunice Radioactive Waste Treatment Centre
CD	Civil defence
CO	Carbon monoxide
C <sub>org.</sub>	Organic carbon
CRAM	Captured radioactive materials
EBRD	European Bank for Reconstruction and Development
EU	European Union
FCC	Fibre concrete container
FP LRAW	Final Processing of Liquid Radioactive Waste
INES	International Nuclear Event Scale
IRAW	Institutional radioactive waste
IRAWS	Integral radioactive waste storage
ISFS	Interim Spent Fuel Storage
JAVYS, a.s.	Jadrová a vyrad'ovacia spoločnosť, a joint stock company
JESS	Jadrová energetická spoločnosť Slovenska, a joint stock company
LIA	Long-term intangible assets
LRAW	Liquid radioactive waste
LTA	Long-term tangible assets
MEc SR	Ministry of Economy of the Slovak Republic
ME <sub>n</sub> SR	Ministry of Environment of the Slovak Republic
MPB	Main Production Building
MTC SR	Ministry of Transport and Construction of the Slovak Republic
NF	Nuclear facility
NNF SR	National Nuclear Fund of the Slovak Republic
NPP	Nuclear power plant
NO <sub>x</sub>	Oxides of nitrogen
NRA SR	Nuclear Regulatory Authority of the Slovak Republic
NRWR	National Radioactive Waste Repository
OHS	Occupational Health Safety
PHA SR	Public Health Authority of the Slovak Republic
RAW	Radioactive waste
RAW PTT	Radioactive Waste Processing and Treatment Technologies
SE, a. s.	Slovenské elektrárne, a joint stock company
SE-EBO	Slovenské elektrárne, a joint stock company, Bohunice Nuclear Power Plant (V2 NPP)
SE-EMO	Slovenské elektrárne, a joint stock company, Mochovce Nuclear Power Plant (EMO1,2)
SNF	Spent nuclear fuel
SO <sub>2</sub>	Sulphur dioxide
SRAW	Solid radioactive waste
VLLW	Very low-level radioactive waste

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ANNUAL REPORT



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