

Answers to the Questions Posted to Lithuania

8th Review Meeting of the Contracting Parties to the Convention on Nuclear Safety (CNS) 2020

No.	Posted By	Article	Ref. in National Report	Question / Comment	Answer
1	Belarus	Article 11.2	p. 47	Could you, please, provide information, how knowledge transfer is organized in VATESI as well as HR management and competence development taking into account phasing out a nuclear programme?	<p>Rules of Procedure for Personnel and Knowledge Management, <i>inter alia</i>, describe measures of knowledge management. The following practical measures of knowledge transfer applied:</p> <ol style="list-style-type: none"> 1) all information, gathered during meetings, conferences, training courses, is gathered within one database, so that all employees can use it; 2) information that is deemed to be of immediate importance is shared with interested employees through sharing a report on the event or during internal presentations; 3) all employees are periodically informed about relevant information received. <p>Rules of Procedure for Planning of Human Resources establishes the following tools for long-term management of human resources, that are important to knowledge transfer:</p> <ol style="list-style-type: none"> 1) procedure for management turnover of personnel: all positions are divided into groups indicating their likelihood of turnover, availability of human resources for replacement, the importance of the position, etc.; a plan of measures for compensation of departure of staff is composed for positions, that are deemed to make highest impact upon leaving and most difficult to replace. Particular measures of knowledge transfer are described in the aforementioned plan, such as detailed documentation of certain procedures, creation of databases, organizing work in a manner allowing employees to familiarise themselves with functions of their colleagues in order to be able to replace them for short or long term leave or in case of merging positions; 2) tool for working time tracking, which allows to evaluate the distribution of functions between positions and divisions, adequacy of workload. It can also help to indicate areas where improvement of competence is needed based on time spent on different tasks;

					<p>3) different methodologies for evaluating how many and what kind of employees are needed in long-term perspective, such as “blank page” planning method, evaluation of responsibilities method, etc.</p> <p>The actual country’s nuclear programme is taken into consideration while using all of the aforementioned tools for long-term management of human resources.</p> <p>Additionally, the Law on Civil Service of Republic of Lithuania now allows employing mentors. Civil servants may only be persons of ages 18–65, therefore specialists cannot carry out their functions as civil servants after the age of 65. However, they can be retained in the organization and transfer their knowledge on basis of mentoring employment agreement, or on another basis.</p>
2	Belarus	Article 11.2	p. 43	<p>Could you, please, provide information what are the main qualification requirements for an instructor at a nuclear power plant training center?</p>	<p>The main qualification requirements for Ignalina NPP chief instructors are as follows:</p> <ul style="list-style-type: none"> • to have higher technical education; • to have knowledge and skills in provided training fields; • at least 5 years working experience in provided training fields; • to have teaching skills, understanding of the specificity of training and learning; • to be able clearly and in an argumentative manner to teach the subject orally and in writing; • to have necessary personal qualities: good communication skills, responsibility, honesty, attentiveness. <p>The instructor providing radiation safety training additionally must get the certification by the regulatory authority (VATESI).</p>
3	Belarus	Article 11.2	p. 43-45	<p>Could you, please, explain in more details, what are the specific activities to improve the competence of employees? Where (at what institutions) are employees trained?</p>	<p>Competences of the employees are improved through:</p> <ul style="list-style-type: none"> • organizing and performing of training by the INPP instructors (training on the introduction to the position, training in the field of radiation safety, fire safety, occupational safety and health, performing of hazardous works); • organizing and performing of the training by the contractors within the scope of implementation of decommissioning projects, or by the equipment suppliers within the scope of the equipment supply contract; • preservation and improving of qualification in external training institutions of the Republic of Lithuania and abroad in accordance with the annual personnel training plan; • participation at the IAEA workshops and experience exchange missions.

4	Belarus	Article 11.2	p. 46	<p>Could you, please, explain in more details the updated integrated management system procedures concerning knowledge management. What improvements have been made? How the specific knowledge is identified for further control?</p>	<p>In 2017, the IAEA workshop on knowledge preservation and accumulation was held at the INPP dedicated for assessment of the program and activity on knowledge preservation and accumulation. As a result of the workshop, the following documents have been updated:</p> <ul style="list-style-type: none"> • SE Ignalina Nuclear Power Plant Activity Strategy; • SE Ignalina Nuclear Power Plant Human Resource Management Policy; • Human Resources Management Procedure; • Indicators of the Human Resources Management Process; • SE Ignalina Nuclear Power Plant Knowledge Accumulation and Preservation Program. <p>As well as the following documents have been prepared:</p> <ul style="list-style-type: none"> • Methodology for Identification of INPP Critical Staff; • SE Ignalina Nuclear Power Plant Action Plan for Long-Term Human Resources Supply. <p>In the routine manner it is planned to complete identification and implementation of the measures on preservation of knowledge of the critical staff of the enterprise, then to revise the list of the critical staff and to activate the process of knowledge preservation according to the updated list of critical staff of the enterprise.</p>
5	Belarus	Article 11.2	p. 47	<p>Could you, please, specify, do you have a special program for knowledge transfer and do you conduct training for senior employees to improve their skills in knowledge transfer?</p>	<p>The activity related to the knowledge preservation is carried out in compliance with the SE Ignalina Nuclear Power Plant Knowledge Accumulation and Preservation Program.</p> <p>The workshops with the participation of the INPP subdivisions coordinators responsible for performance of activity related to the knowledge preservation is held annually at the INPP.</p>
6	Belarus	Article 11.2	p. 43-45	<p>Could you, please, specify, do you have employee training schedules that correspond to the current state of the life cycle of Ignalina NPP?</p>	<p>Within the scope of development and implementation of the decommissioning projects related to equipment dismantling, spent nuclear fuel handling, radioactive waste treatment, action plans in relation to the personnel training are developed and implemented in the current mode. Either the contractor's staff or the INPP personnel who have prior undergone training at the contractor's site conduct the corresponding training.</p>

7	Belarus	Article 11.2	p. 47	What competencies are required from employees of the regulatory body at the stage of NPP decommissioning?	<p>The competences needed depend on the position. Employees in positions, working mainly with NPP decommissioning, are required:</p> <p>1) to have general competences of drafting legal acts, performing inspections and applying enforcement measures, as well as licensing, and specific competences in professional analysis (as determined after evaluation and conclusion of five year individual plans for improvement of competence);</p> <p>2) to have higher university education in physical or technology sciences, up to 2 year experience in nuclear energy field (depending on a position), have knowledge in technology of nuclear power plants and safety principles, have knowledge of decommissioning, dismantling, radiological characterization and radiation protection legal acts and knowledge of English and Russian languages at least of B2 Europass level.</p> <p>The specific skills and competences related to decommissioning are acquired through training courses, on the job training and individual studying.</p>
8	Belarus	Article 11.2	p. 43-45	What is the specify of training methods that Lithuania use to develop human resources in view of the phase of Ignalina NPP decommissioning and the removal of spent nuclear fuel to storage?	<p>Training of the INPP personnel in the field of spent nuclear fuel handling is conducted by the contractors within the frame of implementation of the decommissioning projects related to spent nuclear fuel handling. After the training, the trained personnel is authorized to perform cold and hot trials conducted as a constituent part of the project implementation and later after completion of the trial programs the personnel undergo certification at the enterprise following the developed instructions and procedures. After successful certification the personnel is authorized to start work independently following the procedure established at the INPP.</p>
9	Belarus	Article 12	p. 51	Could you, please clarify how does VATESI assess human and organizational factors during inspections (whether it is targeted inspections with a special inspection program or something else?).	<p>VATESI performs several types of inspections: regular, targeted and technical. Regular inspections on HOF are being planned and conducted not less than once per year according to the periodicity established in VATESI inspection program for 5 following years. Special programme (plan) to assess human and organizational factors is being prepared before each inspection.</p>
10	Belarus	Article 13	p. 54-55	Could you, please, clarify if there are established criteria in Lithuania for assessment of the effectiveness of licensees quality systems?	<p>The Nuclear Safety Requirements BSR-1.4.1-2016 “Management System” define mandatory provisions with regard of monitoring and assessment of the effectiveness of the (quality) management system and all its processes.</p>

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11	Belarus	Article 13	p. 54-55	<p>8. On the page 54-55 is written about a deep review of the documents regarding management systems as within the licensee issuing procedure as well as during inspections, also requiring correction actions if needed. Does inspectors have the necessary training in the sphere of management systems since such activity essentially means deep audits of IMS. Or VATESI uses an expert support for performing mentioned activity?</p>	<p>VATESI specialists, performing inspections in the area of management systems, have passed formal training and examination. Inspections in the area of management systems normally are performed by VATESI specialists. There is a right to engage an external expert (e.g. certified auditor) into such inspections if VATESI considers necessary.</p>
12	Belarus	Article 14	p. 55-60	<p>Could you, please, clarify, was a probabilistic safety analysis (PSA) conducted for the Ignalina NPP spent nuclear fuel storage facility (ISFSF) and what were the results?</p>	<p>Probabilistic and deterministic approaches were applied for initiating events selection and evaluation, and their results are provided in the corresponding safety analysis reports of spent nuclear fuel storage facility (ISFSF). The likelihood of accidents which may cause serious radiological consequences in the ISFSF is very low in comparison with such accidents in the NPPs. IAEA provides recommendations how to conduct PSA (level 1 and level 2) only for NPPs. Due to these reasons and according to our legislation, comprehensive PSA is mandatory only for NPPs.</p> <p>This question is related with Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention). Thus, we believe that further discussion, if needed, shall be continued in the framework of Joint Convention.</p>

13	Belarus	Article 15	p. 64-75	<p>Taking into account the long-term operation of the facilities for the management, storage and disposal of radioactive waste and spent nuclear fuel, it is necessary to assess the effective dose of the population for nearby settlements of the Republic of Belarus for all irradiation routes, including all types of water use, taking into account water bodies and watercourses of the Republic of Belarus.</p>	<p>In accordance with the Law on the Environmental Impact Assessment of Proposed Economic Activity the decision, whether the proposed economic activity by virtue of its nature and environmental impacts may be carried out on the chosen site, may be taken only after having performed the environmental impact assessment. The list of nuclear facilities for which EIA should be carried out is in line with those listed in the United Nations Convention on Environmental Impact Assessment in a Transboundary Context and in the Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (as amended by Directive 2014/52/EU), and includes construction and decommissioning of nuclear power plants, management, storage and disposal of radioactive waste, etc. Comprehensive environmental impact assessments have been performed for all the new spent nuclear fuel, solid radwaste management, storage and disposal facilities, including in the transboundary context. Decisions regarding suitability of the sites for the proposed activities and the potential impact of ionizing radiation to the personnel, public, environment components, including neighbouring countries, have been taken after evaluation of all relevant factors likely to affect the safety of such facilities during their entire operational lifetime, as well as after their closure.</p> <p>Neighbouring countries Latvia and Belarus participated in the EIA process and the international consultations (for details see the 5th National Report of Lithuania on the implementation of the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management, as well as the official INPP website section related to the environmental impact assessment, https://www.iael.lt/en/activity/environmental-impact-assessment/154).</p> <p>The Lithuanian Hygiene Standard HN 73:2018 “Basic Standards of Radiation Protection” establishes the annual effective dose constraint of 0.2 mSv for the general public due to exposure resulting cumulatively from the direct impact, by water ways and by air ways.</p> <p>This dose constraint is applied for design, operation (normal operation conditions), decommissioning of nuclear installations and assessment of exposure of the general public resulting from the closed radioactive waste disposal facilities. If the public exposure may result from the activity of more than one nuclear installation, the total annual effective dose resulting from the activity of all nuclear installations shall not exceed the established annual effective dose constraint.</p>
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14	Belarus	Article 15	p. 64-75	<p>Scenarios should be considered of the release of radioactive substances with groundwater and groundwater from the storage and disposal of radioactive waste and spent nuclear fuel into water bodies, such as Disna river, Drysvyaty lake, Prorva river, Boginsky lakes, due to the degradation of protective barrier materials.</p>	<p>The scenarios related to degradation of engineering barriers of the radioactive waste disposal facilities (Landfill Facility for Short-lived Very Low Level Waste (Landfill) and Near Surface Repository (NSR)) were assessed in the Environmental Impact Assessment Reports and the Safety Analysis Reports of these facilities. Based on these data the Environment monitoring programmes have been developed defining measurements (including ground water monitoring) which are important for analysis of radionuclide migration, for assessment of the public exposure and for confirmation that the safety of the facility is in compliance with the design and safety assessment requirements. The programmes cover pre-operational, operational and post-closure phases of the radwaste disposal facilities evolution. The programmes also provide requirements for monitoring data collection, reporting and quality management.</p> <p>In respect to the monitoring of the pathways for potential contaminant migration with the groundwater the following will be performed:</p> <ul style="list-style-type: none"> Monitoring of shallow unconfined groundwater, including its lateral flow to local bogs, channels, ponds and Lake Druksiai; Monitoring of semi-confined aquifer and its lateral flow to Lake Druksiai; Monitoring of confined aquifer and its lateral flow; Monitoring of Lake Druksiai as the main discharge area of unconfined, semi-confined and confined aquifers. <p>Though the active and passive institutional control periods for these facilities differ, but during the active institutional control period the Landfill and the NSR engineering barriers will be monitored against possible intrusion using strict safeguards measures, necessary maintenance works will be carried out, monitoring of the Disposal facility and its environment will be performed.</p> <p>During the passive institutional control period it will be restricted to use the territory of the Landfill and the NSR for the defined periods.</p> <p>Such active and passive control periods are related to the nuclide migration scenarios evaluated in the Safety Analysis Reports demonstrating that such</p>

				<p>periods ensure that in case of engineering barriers degradation during these periods the impact to population and the environment remains below the established limits.</p> <p>In performing safety assessment of the new spent fuel and radioactive waste management, storage and disposal facilities based on existing conditions, allowable radionuclide inventory was assumed for impact assessment in order to ensure that adequate protection measures are implemented for protection against the negative impact of ionizing radiation resulting due to theoretically possible releases of radionuclides and the direct external exposure. Safety analysis reports evaluate as base scenarios of natural evolution of disposal facilities, as well as hypothetical scenarios, “what if” scenarios. For instance, in case of the NSR, 8 groundwater pathway “What if” scenarios related to the immediate degradation of concrete engineered barriers immediately after the NSR closure were analysed. The calculations show that the peak doses to the members of the identified reference groups for the Reference and Alternative groundwater pathway scenarios make about 0.025 mSv/y and are below the established dose constraint (0.2 mSv/y). The highest impact would be to the well water user. Depending on the scenario, 84-99% of the dose is determined by organic C-14.</p> <p>The calculated peak doses for the hypothetical ‘What if’ scenarios related to the groundwater pathway are below the dose constraint as well, what demonstrates the robustness of the engineered barriers system and gives confidence that it is capable to ensure the required level of protection.</p> <p>Besides, the mock-up facility implementing the actual design solutions of the NSR engineered barriers will be constructed on the NSR site. The mock-up facility will be used for long-term field tests of the engineered barriers to demonstrate suitability of selected concept and materials, durability of engineered barriers and to improve accuracy of safety relevant parameters.</p> <p>This question is related with Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention). Thus, we believe that further discussion, if needed, shall be continued in the framework of Joint Convention.</p>
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15	Belarus	Article 15	p. 64-75	<p>The sanitary protection zone around the site of the storage, disposal of radioactive waste and storage of spent nuclear fuel should be reviewed taking into account the activities of all points of radioactive waste and SNF management. The use of a sanitary protection zone calculated from the discharge point during normal operation of nuclear power plants is unacceptable for radioactive waste management facilities that have been in operation for much longer, and therefore environmental pollution from these facilities is of a different nature.</p>	<p>The size of the sanitary protection zones around the spent nuclear fuel storage facilities and radioactive waste storage and disposal facilities were evaluated and substantiated during the environmental impact assessment process of each of the facility on the basis of the performed assessment of the potential radiological impact to the health of the general public. Based on the calculations it is proved that at the boarder of the established sanitary protection zone the impact to the general public may be considered as insignificant. However, the conservative approach is applied at the INPP – till the end of the decommissioning project the existing 3 km INPP sanitary protection zone and 30 km surveillance zone remain valid as in case of operating NPP, i.e. greater than it is required.</p> <p>After completion of the INPP decommissioning project borders of the sanitary protection zone and surveillance zone will be reviewed considering the information provided in the environmental impact assessment reports of each of the spent nuclear fuel storage facility and radioactive waste storage and disposal facility.</p> <p>This question is related with Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention). Thus, we believe that further discussion, if needed, shall be continued in the framework of Joint Convention.</p>
16	Belarus	Article 15	p. 64-75	<p>In accordance with the IAEA GSR Part 6 it is necessary to develop a decommissioning strategy that applies to all facilities located on the site, so that when planning for individual facilities, it is necessary to take into account the interdependencies between the facilities and evaluate the impact of the facilities at the Ignalina NPP site on the population and personnel, including the population of the Republic of Belarus, living within in 30 km from the INPP.</p>	<p>The Resolution of the Government of the Republic of Lithuania No. 1848, “On the State Enterprise Ignalina Nuclear Power Plant Unit 1 Decommissioning Method” dated November 26, 2002, defined that the Ignalina NPP is decommissioned following the immediate dismantling strategy.</p> <p>The Final Ignalina Nuclear Power Plant Decommissioning Plan is the definitive and fully inclusive reference document covering the entire INPP decommissioning period.</p> <p>Considering that the INPP decommissioning is following the immediate dismantling strategy with the final goal of reaching the final status of the INPP site when as much as possible of the site could be free released, i.e. allocated the status of the green field, still several facilities related to the radioactive waste storage and disposal will remain in operation after the INPP decommissioning and will be operated as separate nuclear installations with the separate sanitary protection areas, physical security barriers and environmental monitoring systems. The safety, short-term and long-term impact on workers, the environment, and the population, as well as well the population of neighbouring countries, including the</p>

					<p>overall impact of all the on-site INPP facilities is assessed during the environmental impact assessment process and the safety justification process of these facilities, for further response, see response to Q 13 (QID27462).</p> <p>This question is related with Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention). Thus, we believe that further discussion, if needed, shall be continued in the framework of Joint Convention.</p>
17	Belarus	Article 15	p. 64-75	<p>In accordance with the IAEA GSR Part5 it is necessary to provide information on the assessment of radiation doses and risks to public health throughout the entire life of all facilities located at the site of Ignalina NPP. In accordance with the IAEA GSG-3 and SSG-23 it is necessary to provide data on the assessment of environmental impact and the assessment of short-term and long-term human exposure (dose assessment of the population is carried out for compliance with the limiting doses).</p>	<p>See response to Q 15 (QID27460).</p>
18	Belarus	Article 15	p. 64-75	<p>In accordance with the IAEA GSR Part5 when planning activities for the long-term storage and disposal of radioactive waste, it is necessary to carry out a short-term and long-term assessment of the impact of facilities on personnel and the public - until the end of the operation period of all plants. Considering the fact that a near-surface disposal site for short-lived, low-, medium-level radioactive waste is being built at the site of Ignalina NPP (project B25), impact assessment</p>	<p>The radiation safety of the Near Surface Disposal Facility for short-lived low- and intermediate-level radioactive waste, including short-term and long-term effects was assessed in the Preliminary Safety Analysis Report by addressing potentially arising impacts of ionizing radiation from the direct exposure, radionuclide migration via aquatic pathway and atmospheric releases.</p> <p>In respect to the Near Surface Repository the following can be stated:</p> <ul style="list-style-type: none"> • The site for the repository was selected from 3 pre-qualified and evaluated sites, taking into account the position of the neighbouring countries - Latvia and Belarus, which, in accordance with the requirements of the United Nations Convention on EIA, participated in the discussion of the proposed economic activity. • The potential doses estimated for representative person under the number of conservative assumptions in case of Reference Scenario (most penalizing well

				<p>per population should be done for a period of up to 300 years.</p>	<p>water user) are below the established dose constraint approx. by factor of 3.3. Considering Alternative Scenarios (when certain disturbance are allowed) estimated doses remain below the dose constraint about by factor 2.5 and in case of extreme conditions when particular engineered barriers under consideration are influenced in an exaggerated way ('what if' scenarios) estimated doses remain also below the dose constraint.</p> <ul style="list-style-type: none"> • The dose constraint applicable to long-term safety assessments is set considering the overall impact from the all the nuclear facilities at the INPP site as well as the peak times of radiological impacts from the planned nuclear facilities exposing the same individuals. <p>See also response to Q13 and Q 14 (QID27462 and QID27461). This question is related with Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention). Thus we believe that further discussion, if needed, shall be continued in the framework of Joint Convention.</p>
19	Belarus	Article 15	«Overview of arrangements and regulatory requirements concerning radiation protection at nuclear installations», p. 64	<p>The following information mentioned in the section «Overview of arrangements and regulatory requirements concerning radiation protection at nuclear installations»: «Pursuant to the Law on Nuclear Safety the plan for radioactive discharges into environment is one of documents that shall be submitted to VATESI together with documents accompanying the application for the issuance of licences for activities indicated in the Law. A plan for radioactive discharges into environment shall be prepared and updated in accordance with the procedure established by the Nuclear Safety Requirements BSR-1.9.1-2017 "Standards of Release of Radionuclides from Nuclear</p>	<p>According to the Nuclear Safety Requirements BSR-1.9.1-2017 "Standards of Release of Radionuclides from Nuclear Installations and Requirements for the Plan on Release of Radionuclides", prior to the start of the operation or decommissioning of Nuclear Facility, the Entity shall evaluate activity limits of the radionuclides released to air and water. Activity limits shall be determined separately for each significant radionuclide or their groups (e.g., noble radioactive gas). In the course of grouping of the radionuclides parameters of the most radiologically dangerous radionuclide shall be applied.</p> <p>According to the Law on Nuclear Safety, A plan for radioactive discharges into environment shall be updated and agreed on with State Nuclear Power Safety Inspectorate (VATESI):</p> <ol style="list-style-type: none"> 1) in case there are found a new discharged radionuclides, or their pathways, media or points of discharge; 2) in case it was found out that radionuclides that were not identified in a plan for radioactive discharges into environment had been discharged into environment (unplanned release). <p>The current Plan of discharges from Ignalina NPP to the environment was updated and agreed on with VATESI in 2015. The limits of radionuclides discharged to the air are established to the Inert Radioactive Gases and Long-lived radionuclides</p>

				<p>Installations and Requirements for the Plan on Release of Radionuclides". Please provide information, which radionuclides are subject to mandatory inclusion in plans for the release of radionuclides into the environment. For which radionuclides limits on air emissions and discharges to water objects are established?</p>	<p>radionuclide groups, H-3 and C-14. Inert Radioactive Gases consists of Kr-85 and Xe-133 radionuclides. Long-lived radionuclides consists of: Mn-54, Fe-55, Co-58, Co-60, Ni-63, Ni-59, Sr-90, Nb-94, Tc-99, I-129, I-131, Cs-134, Cs-137, Eu-152, Eu-154, U-235, U-238, Am-241, Cm-244, Pu-238, Pu-239, Pu-240, Pu-241.</p> <p>The limits of radionuclides discharged to the water are established to the following radionuclides: Mn-54, Fe-59, Co-60, Nb-94, Sr-90, Cs-134, Cs-137, H-3.</p>
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20	Belarus	Article 16.1	p. 76	<p>Article 16 (1) contains the following information: «The arrangements for ensuring the off-site preparedness and response to nuclear and radiological emergencies are established in the National Plan for Protection of Population in case of Nuclear or Radiological Emergency (hereinafter – Plan). The Plan was amended in 2018 due to the current construction of a new nuclear power station on the Ostrovets location, Belarusian Republic».</p> <p>1. Could you, please, specify whether, when amending the National Plan, the hazard was reassessed taking into account the following factors:</p> <p>carrying out works on decommissioning of the Ignalina NPP, including the dismantling of systems and equipment providing safety functions of the NPP. Such activities reduce the level of protection of the safety barrier and the plant as a whole and, therefore, increase the probability of an accident with serious consequences for the environment and the public;</p> <p>the commissioning in 2017 of an intermediate spent nuclear fuel storage facility.</p>	<p>1. In accordance with the Law on Nuclear Safety of the Republic of Lithuania, safety assessment (including impact to the environment) must be performed for each nuclear facility before the start of the facility operation. The same requirements are applied to decommissioning projects, including dismantling and decontamination projects. Such works are authorised to be performed after their safety justification. One of the issues of analysis and justification is to ensure emergency preparedness both during operation and during decommissioning of a nuclear facility.</p> <p>If the results of the performed safety analysis show that some activities may reduce safety assurance, then it is required to build or implement a safety barrier physically or to strength existing organizational and technical measures of safety assurance.</p> <p>At present, according to the available results of safety analysis design basis accidents and beyond design basis accidents for operating facilities and nuclear facilities being decommissioned show, that significant consequences of mentioned accidents will do not go beyond the sanitary protection zone of Ignalina NPP (i.e. 3 km radius zone). The analysis results were provided to working group responsible for development of National plan and Plan was accordingly updated. Internal INPP emergency procedures and emergency plan is being constantly updated and validated in a light of ongoing decommissioning projects and start of operation of new nuclear facilities.</p> <p>Results of analysis based on IAEA General Safety Requirements GSR Part 7, Requirement 4, for nuclear installations and facilities such as Spent Nuclear Fuel (SNF) storage pools, reactors (graphite of the reactor core), interim SNF storage facilities, solid radioactive waste treatment and storage facilities, and bitumen solidified radioactive waste storage facility show that even in case of accidents of very low probability of occurrence, the annual effective dose at borders of neighbouring countries is far below limit for annual effective dose of 1 mSv. Other cases demonstrated even lower doses.</p> <p>2. In accordance with the Law on Nuclear Safety of the Republic of Lithuania Ignalina NPP annually plans and conducts exercises on emergency preparedness. Also, Ignalina NPP performs a full scope exercise with participation of response organizations, municipalities and regulatory body once per three years. After each exercise on emergency preparedness a corrective action plan and/or measures to strengthen emergency preparedness is developed. To figure out identified issues</p>
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				<p>Have these factors been taken into account in the external and internal plans of the Ignalina NPP and the intermediate spent nuclear fuel storage facility?</p> <p>2. How the experience and lessons learned from scientific research, operations and emergency exercises, as well as new technological developments are taken into account when reviewing emergency procedures (according to the IAEA safety standards GSR Part 7, requirement 4, paragraph 4.25)?</p> <p>3. How the requirement 15 of the IAEA GSR Part 7 (regarding management of radioactive waste that may be generated in large quantities in the event of a nuclear or radiological emergency) is addressed in the emergency plans.</p>	<p>or to improve emergency preparedness organizational and technical measures, lessons learned as well as new technological developments are taken into account.</p> <p>3. To manage generated radioactive waste in the event of a nuclear or radiological emergency at Ignalina NPP, according to emergency procedures a special Team was created and trained.</p> <p>According to the National Plan for Protection of Population in case of Nuclear or Radiological Emergency Ignalina NPP is considered as the main radioactive waste manager. Main functions of Ignalina NPP are as follows:</p> <ul style="list-style-type: none"> - collection and transportation of generated radioactive waste for characterization or temporary storing at RAW treatment facilities in accordance of their amount. If necessary, the municipalities are referred to for assistance; - giving consultations on RAW collection or transportation; - giving recommendations on decontamination technique to municipalities Teams.
21	Belarus	Article 19.8	p. 114	<p>The National Report says the following: «The additional task is to ensure long-term safety of spent nuclear fuel and long-lived radioactive waste by constructing a deep geological repository within the Lithuanian territory.»</p> <p>Could you, please clarify:</p> <p>1. What time frames are designated for</p>	<p>According to a Development Programme of Radioactive Waste Management construction of Deep Geological Repository (DGR) will be executed in the period of 2040-2066. No exact sites are yet under consideration for either the underground research laboratory or the DGR.</p>

				<p>the construction of a disposal site for high-level radioactive waste in deep geological formations?</p> <p>2. What sites are currently under consideration?</p>	
22	Belarus	Article 19.8	p. 115	<p>Could you, please, clarify the following information regarding the dismantling of the irradiated graphite masonry of the reactors of the Ignalina NPP:</p> <p>1. Is the procedure for safe handling of highly active graphite masonry defined?</p> <p>2. Is there a deadline for starting such work?</p> <p>3. Are there enough sources of funding for the implementation of such work?</p>	<p>1. Currently the Ignalina NPP is in the process to start the procurement of the engineering services associated with dismantling of the Ignalina NPP both reactor cores with the objective to develop the safety and licensing documents including the engineering design for the dismantling of Zone R3 of both reactors and for the management of the generated waste and the environmental impact assessment report.</p> <p>2. Based on the Final Decommissioning Plan of Ignalina NPP the design and licensing process of the Ignalina NPP reactor cores dismantling is scheduled to be finalized by 2027, thus dismantling of Unit 1 is expected to start in 2027 and Unit 2 in 2029.</p> <p>3. Yes, based on the Cost estimates made in the Final Decommissioning Plan and the overall Ignalina NPP Decommissioning Program sufficient funding is ensured for the implementation of this Project.</p>
23	Belarus	Article 19.8	p. 114-115	<p>Could you, please, provide information about the results of the analysis of resistance to external influences of natural and man-made nature, as well as the analysis of accidents and planned protective measures when handling damaged spent nuclear fuel (including heavily damaged fuel assemblies located in the storage pools), at the Ignalina NPP.</p>	<p>The corresponding external influences to spent nuclear fuel management and storage at interim spent nuclear fuel storage facility-2 (ISFSF-2) were considered in the safety analysis report. No specific unusual events concerning these influences were identified. Therefore set of postulated design basis accidents during handling and processing of damaged and experimental fuel assemblies and fuel debris retrieval at the Reactor Units were considered as follows:</p> <ol style="list-style-type: none"> 1. Drop of cartridge with fuel bundle; 2. Drop of transfer case with spent fuel assembly; 3. Impact of cartridge with cask (or pool structures); 4. Cutting of fuel rods; 5. Cartridge is lifted above the minimum water height required for shielding;

					<p>6. Drop of the damaged spent nuclear fuel handling system components. The expected exposures of the population in all cases of design basis accidents are insignificant.</p> <p>The evaluation of the damaged/experimental fuel handling operations in the Reactor Units has not revealed beyond design basis accidents.</p> <p>No specific procedures, i.e. additional to existing ones, are needed in cases of emergency during handling damaged spent nuclear fuel.</p>
24	Belarus	Article 19.8	p. 114	<p>The National Report stated that the volume of the ISFSF-2 storage facility intended for temporary storage of spent nuclear fuel holds 200 CONSTOR®RBMK1500 / M2 containers.</p> <p>At the same time, according to the provisions of the 5th National Report of Lithuania on the implementation of the Joint Convention on the Safety of Spent Fuel Management and the Safety of Radioactive Waste Management (Section D, page 18), the total capacity of the ISFSF is 202 CONSTOR®RBMK-1500 / M2 containers.</p> <p>The comments received from the Lithuanian side on the Post-project Analysis Program for the New Nuclear Installations of the Ignalina Nuclear Power Plant (Letter of the Ministry of the Environment of the Republic of Lithuania of September 26, 2019 No. (10) -D8-3127) indicate the capacity of</p>	<p>The ISFSF-2 main storage building is constructed for the preparation and interim storage of 201 CONSTOR® RBMK1500/M2 casks loaded with SNF. At present the amount of SFA at the INPP for loading into new casks corresponds to loading of 190 casks only. One empty cask (191) will be kept as spare.</p>

				<p>this storage in the amount of 201 CONSTOR®RBMK- containers 1500 / M2.</p> <p>Please clarify the capacity of ISFSF-2 (for how many CONSTOR®RBMK- 1500 / M2 containers it is designed)?</p>	
25	Belarus	Article 7.1	p. 11	<p>Article 7 (1) says, that there are 4 main laws governing nuclear energy in Lithuania:</p> <p>Law on Nuclear Energy;</p> <p>Law on Nuclear Safety;</p> <p>Law on Radiation Protection;</p> <p>Law on the Management of Radioactive Waste</p> <p>Is where any intentions or planes to consider consolidation (systematization) of the provisions of these 4 laws in 1 of 2 legislative acts?</p>	No, there are no such plans, as there is no apparent need for that.
26	Belarus	Article 7.2	p. 16-17	<p>Could you clarify, how VATESI identifies areas of its integrated</p>	<p>VATESI evaluates effectiveness and identifies areas of integrated management system improvement through:</p> <ul style="list-style-type: none"> • Self-assessment;

				management system improvements and assesses the effectiveness of IMS?	<ul style="list-style-type: none"> • Management Review; • Internal and external audits; • Feedback from interested parties; • Assessment of processes and its results, preparation and analysing of annual process performance reports; <ul style="list-style-type: none"> • Managing of non-conformities, review of the effectiveness of implemented corrective actions; • Management of risks and opportunities and assessment of effectiveness of actions taken to address risks and opportunities; • other tools.
27	Belarus	Article 7.2	p. 16-17	Could you explain, how safety culture assessment (self-assessment) is organized in VATESI? In what procedures of VATESI integrated management system it is documented?	<p>Procedure for Development of Organizational Culture is established and documented within VATESI integrated management system. It defines safety and security culture monitoring, assessment and improvement measures.</p> <p>The main part of assessment is annual survey of VATESI staff. This survey is anonymous. Questions of the survey are prepared taking into consideration all important safety culture attributes defined in the IAEA safety standard GS-G-3.1 Application of the Management System for Facilities and Activities. Results of the survey are analysed and documented in the report. Annual discussion is organized about the results of survey, existing situation, trends, areas for improvement and possible improvement measures.</p>
28	Belarus	Article 7.2	p. 16-17	Could you, please, give the information, what international requirements are implemented into VATESI integrated management system?	<p>VATESI integrated management system (IMS) is established and implemented based on the IAEA and ISO management system standards. VATESI IMS was revised and is continually improved in line with the IAEA GSR Part 2 general safety requirements Leadership and Management for Safety and ISO 9001:2015 Quality Management System Requirements. VATESI IMS was certified as compliant with ISO 9001:2015 in 2018.</p> <p>Core VATESI processes (as for example Licensing, Review and Assessment of Safety Submittals, Inspections, Consultations, Enforcement, Public Communication, etc.) are prepared taking into consideration requirements of all main IAEA safety standards for these specific areas.</p>

29	Belarus	Article 7.2	p. 20	<p>The Article 7(2)(ii) – System of licensing provides the following information: “As regards the authorisations for site evaluation, construction, commissioning, operation, decommissioning of a nuclear facility as well as supervision of closed radioactive waste repository, additional provisions are established by the Law on Nuclear Safety. For the purposes of implementation of this Law Nuclear Safety Requirements BSR-1.1.5-2017 “Rules of Procedure for Public Participation in Decision-Making in the Area of Nuclear Energy” were adopted by the Head of VATESI. According to aforementioned Nuclear Safety Requirements, VATESI and (or) licence holder should:…- consider comments provided by the public on VATESI’s draft decisions and safety justification documents;…”</p> <p>Does it mean that the public has the opportunity to consider documents justifying safety? Are there any restrictions regarding documents that are provided to the public? Can anyone be familiar with the documents and submit comments? How the comments and suggestions of the public based on the results of the consideration of documents are addressed?</p>	<p>As per requirements of Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, the public may be granted access to safety documents.</p> <p>Pursuant to Paragraphs 4 and 10 of Article 39(1) of the Law on Nuclear Safety, the public cannot get access to information, which is prohibited to be provided pursuant to the Laws of Republic of Lithuania (for example, classified information), as well as information, for which the Law on the Right to Obtain Information from State and Municipal Institutions and Agencies is not applicable (for example, information which is the object of industrial property rights, information, which according to laws is recognised as confidential for the reasons of national or public security, national defence interests or restricted use of statistical data or which includes state, official, commercial, professional or bank secrets, as well as in other cases provided by laws, etc.).</p> <p>Anyone can submit comments, information, analyses or opinions. The comments are first provided to the applicant. The applicant shall review and consider them and provide the regulatory authority (VATESI) with the results of such consideration – amended documents, if they decide to take account of the comments, and comments together with argumentation why they were rejected if so. At the end of the process of deliberation of all safety documents provided with the application, after VATESI announces there is a draft decision available, the public may comment on the decision and related final safety documents. If VATESI decides to take account of the comments of the public, the draft decision may be amended or there could be additional inquiries of the applicant. If the comments are rejected, the argumentation shall be published on VATESI’s website together with the final decision.</p>
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30	Belarus	Article 7.2	p. 19-20	<p>Could you, please, provide the information, is it necessary to obtain personal permits (licenses) to employees for the right to conduct work on the use of atomic energy in Lithuania? If yes, what categories of workers should receive such permits (licenses)? What types of work are issued such permits (licenses)? What are the requirements for employees receiving such permits (licenses)? How is the compliance with the terms of such permits (licenses) monitored? For what reasons can the validity of these permits be suspended or terminated?</p>	<p>Senior management of nuclear installation, responsible for nuclear safety, radiation protection, physical protection of nuclear facilities, nuclear material and nuclear fuel cycle materials and for the independent oversight of these processes should be certified by VATESI. This Certificate confirms that person has necessary knowledge in nuclear power to take up their duties and is valid for 5 year. Suspension or termination of this Certificate is not foreseen. An employee may be suspended from work and (or) be subject to extraordinary certification if he or she violates rules, instructions or other regulatory requirements that led to (or could lead to) an accident, malfunction, equipment failure or fire.</p> <p>As for the system of certification for position of employees of Ignalina NPP, please refer to the Chapter 11(2) of the National Report.</p>
31	Belarus	Article 7.2	p. 19-20	<p>Could you, please, specify,</p> <ol style="list-style-type: none"> 1) for what types of work personal permits by NPP employees have to be obtained and what is the time period within which a permit is valid? 2) for what reasons such personal permit could be suspend? 3) for what maximum period such license could be suspend? 	<p>Article 50 of the Law on Nuclear Energy of the Republic of Lithuania lays down the specific requirements for labour relations in the field of nuclear energy and establishes clear limitations preventing a person to get unescorted access to the nuclear installation and work there.</p> <p>The Law lays down the requirement that prior to starting working at the NPP, a person shall obtain the right to get unescorted access to the controlled areas of the NPP and (or) the NPP site, the right to participate unescorted in transportation of nuclear materials in quantities laid down in Appendix 1 of the Law on Nuclear Safety and (or) nuclear fuel cycle materials.</p> <p>Limitations that prevent being granted with a permit to get unescorted access to the NPP are mostly related to the following areas: age limit (under 18 years); criminal records for major crimes; criminal records for possession of drugs and similar materials; criminal records for possession of weapons, ammunition, explosives, etc.; cooperation, contacts with the foreign intelligence services or persons keeping contacts with such services; cooperation with terroristic organisations, participation in these organisations; participation in any unregistered antagonistic movements; administrative violations related to drug</p>

					<p>abuse; foreign persons having no valid document permitting to be or reside or work in the Republic of Lithuania; for diseases included into the list of Minister of Health that may pose threat to the normal activity of NPP; in cases if persons do not provide required documents or do not agree to undergo verification or during verification deliberately provide incorrect data; as well as other cases when the person's participation in the nuclear activity may pose threat to the state security.</p> <p>Without prior verification of the personal data by appropriate state institutions and without being granted with a permit authorising to get unescorted access to the nuclear installation a person is forbidden to work at the NPP. Such permits are valid as long as the person works at the NPP and meets the above stated requirements, unless any new information obtained by the appropriate state institutions prove otherwise and the permit is revoked immediately.</p> <p>No time limit is established for revoked permit authorising to get unescorted access to the nuclear installation.</p> <p>For system of certification for position of employees of Ignalina NPP please refer to the Chapter 11(2) of the National Report.</p>
32	Belarus	Article 7.2	p. 18-19	<p>Article 7 (2) says that the procedure for reviewing draft legal acts includes a procedure for coordination with interested parties. It is reported that all projects are available for public comments, which should be evaluated.</p> <p>Could you, please, specify, in which document the results of such an assessment are reflected? What is the procedure to inform the public about the results of the assessment?</p>	<p>Argumentation regarding evaluation of comments from interested parties is provided in a document called "coordination table". It includes the following: name of legal or natural person providing comments, the comments and, in case a comment is declined, argumentation for declining it. The coordination table is published online (on Information System of Legal Acts) together with the draft document, if the draft needs to be presented for further or repeated consideration of interested parties. If the draft is the final stage of the drafting procedure, it can also be published, as mentioned above, or the coordination table together with final draft is provided for the person or entity who provided the comments. All comments need to be considered, but the final decision on whether to take account of them and amend the draft lies with the institution drafting the document.</p>
33	Belarus	Article 7.2.3	p. 21-23	<p>Does VATESI have an access to expert support directly during the inspections?</p>	<p>Yes. According to the Sub-paragraph 4 of Paragraph 1 and Sub-paragraph 6 of Paragraph 2 of Article 12 of the Law on Nuclear Safety, the State Nuclear Power Safety Inspectorate shall have the right:</p> <p>„<...></p>

					<p>4) to employ the services provided by experts and consultants, scientific-technical support organisations, other independent suppliers that are not related to the applicants, licence holders or persons involved in other activities related to nuclear and/or nuclear fuel cycle materials.</p> <p><...></p> <p>6) to involve specialists and experts for the evaluation of nuclear safety and for the performance of other related works.</p> <p><...>.”</p> <p>In accordance with regulations and internal VATESI procedures expert cannot be a leader of the inspection and participates as observer only. The expert is providing necessary consultations for members of inspection commission. Taking into account Lithuanian nuclear power programme, which is related with decommissioning of Ignalina NPP and radioactive waste management, usually there is no practical need to use external expert’s support during VATESI’s inspection activities.</p>
34	Belarus	Article 7.2.3	p. 21-23	Does the radiation risks associated with the facility or activity (including overexposure) belong to the scope of activity of VATESI or it in the sphere of competence of another official body. If it so - who is responsible for that issue and what in general inspection program for it?	<p>Yes. The radiation risks associated with the nuclear facilities and activities (including overexposure) with the sources of ionising radiation in the nuclear energy area and (or) nuclear fuel cycle materials are within the competence of VATESI. The supervision of radiation risks associated with the facility or activity (including overexposure), which are outside the scope of VATESI described above, is performed by Radiation Protection Centre (RSC).</p> <p>VATESI and RCS prepare separate inspection programmes and annual plans in order to cover all concerned radiation risks associated with the facility or activity (including overexposure). VATESI inspections are planned and inspection areas are selected giving priority to the areas of higher risk. The risk is estimated considering aspects set in internal VATESI procedure document. Annual number of inspections and resources assigned for them are going to be determined taking into account the results of risk assessment.</p>
35	Belarus	Article 7.2.3	p. 21-23	Does VATESI performs an inspection of manufactures authorized to provide consumer products as p.3.212 of GSG-13 requires?	<p>No. Supervision of manufacturers of consumer products is not within the competence and scope of VATESI activities. Moreover, currently there are no facilities authorized to manufacture consumer products in Lithuania. General requirements for consumer products are established in Law on Radiation</p>

					<p>Protection Article 4, para 2 and 4, and Hygiene standard HN 73:2018 “Basic radiation protection standards” Chapter VIII, Section 7 and are in line with the IAEA General Safety Requirements Part 3 No. GSR Part 3, paras 3.138-3.3144. The Radiation Protection Center, which is the regulator exercising State supervision of radiation protection, except the facilities and practices in the area of nuclear energy, is responsible for the regulatory control of consumer products and the manufacturers of such products, conducts justification assessment and recognizes such activity as justified. There are documented justification, notification, authorisation and inspection processes in place, if such manufacturers would appear on the market.</p>
36	Belarus	Article 7.2.3	p. 21-23	<p>In article 7 - System of regulatory inspection and assessment is well defined the scope of technical inspections. Unfortunately it is not so for other type of inspections (e.g. special inspections) - does it scope fully cover all issues listed in p.3.215 of GSG-13 “Functions and processes of the Regulatory Body for Safety” (it refers to para 4.53 of GSR Part 1 (Rev.1) as well as p.3.220 of GSG-13?</p>	<p>Yes. VATESI inspections are performed within its competence set by Law on Nuclear Energy and the Law on Nuclear Safety.</p> <p>In accordance with the competence the areas of supervision of VATESI are: all necessary areas in nuclear safety at nuclear facilities and performing activities that involve nuclear and (or) nuclear fuel cycle materials (including, for example, radioactive waste management, fire protection of SSCs important to safety, accident management and management system of operating organization), radiation protection at nuclear facilities, physical security, emergency preparedness at nuclear facilities, accounting and control of nuclear materials as well as with other requirements imposed by the international commitments assumed by the Republic of Lithuania regarding non-proliferation of nuclear weapons. VATESI is performing supervision of nuclear facilities during all lifetime stages of them (siting, design, construction, commissioning, operation, decommissioning).</p> <p>For examples there are following inspections on the operational activities:</p> <ol style="list-style-type: none"> 1. Structures, components and systems (including maintenance processes, design, modifications, tests, ageing management, procedures, records, resources) 2. Electrical and I&C (including maintenance processes, inspections, procedures, resources) 3. Chemistry of related medias (including chemical conditions, procedures, records) 4. Management system, operational experience, other areas.

37	Belarus	Article 7.2.3	p. 21-23	<p>Could you, please, clarify who and what response measures are taken when identifying violations of the law that require an immediate response during an inspection?</p>	<p>Pursuant to the Article 6 Paragraph 4 of the Law on Nuclear Safety, it is mandatory for an employee of the VATESI to order representatives of an economic entity to eliminate a violation immediately if, while at the premises or activity location of the economic entity, the aforementioned employee finds the violation that, if not eliminated, may cause damage due to the hazardous effect of ionising radiation on employees of the nuclear installation, the population or their property and/or the environment.</p> <p>In addition, pursuant to the Article 36⁹ of the Law on Public Administration and Paragraph 19 of the Order No. 22.3-106, 24th of October, 2011, approved by the Head of VATESI “On the Approval of Nuclear Safety Requirements BSR-1.1.4-2017 “Rules of Procedure for Applying the Enforcement Measures Set by the State Nuclear Power Safety Inspectorate”, it is mandatory for the employee of the VATESI to immediately inform authorised representative of the economic entity, individual referred to in the Article 8 Paragraph 1 of the Law on Radiation Protection, radiation protection officer, dosimetry service regarding insignificant violations of legal acts in order to eliminate the aforementioned violations during the inspection carried out by the employee of the VATESI.</p>
38	Belarus	Article 8.1	p. 29-30	<p>There is information about Belarusian NPP safety in VATESI official documents and resources (annual reports, web-site, etc.), despite that there is no such an obligation in the provisions pursuant to Article 39 of the Law on Nuclear Safety and abstracted to the National Report. Could you, please, clarify which reliable sources VATESI uses for preparation such information in the conditions of not finalized agreement with Belarusian national regulatory authority on information exchange?</p>	<p>Paragraph 3 of the Article 38 of the Law on Nuclear Safety defines responsibility of State Nuclear Power Safety Inspectorate to assess the risks for the Republic of Lithuania arising from nuclear installations in the neighbouring countries. The assessment contributes to development of national plan for the protection of population in the event of a nuclear or radiological accident at the nuclear installations in the neighbouring countries.</p> <p>VATESI’s assessment of Belarusian NPP safety is based on Environmental Impact Assessment of Belarusian NPP, communication by official letters with the Ministry of Emergency Situations of the Republic of Belarus, AES-2006 design assessments performed by other countries, review of international experts peer review reports and comments on Belarusian NPP safety issues, other open sources, where Belarusian NPP safety issues are presented and discussed.</p>

39	Belarus	General	p. 6	<p>According to the information from the National Report, 86 packages of spent fuel assemblies were transported to the dry spent nuclear fuel storage facility (ISFSF) after start of the operation of the ISFSF, by the end of 2018 (a little over a year). In this case, the ISFSF will contain about 190 packages in total. Transportation of the remaining spent fuel assemblies (about 100 packages) to the ISFSF is planned to be completed in mid-2022.</p> <p>Could you, please, provide information, is long period (3.5 years) for the transportation of the remaining spent fuel assemblies due to presence of damaged spent fuel assemblies, or is this period due to other reasons?</p>	<p>As of 2019-12-31, 135 CONSTOR®RBMK-1500/M2 casks with spent fuel are already stored in the ISFSF-2.</p> <p>Design loading time of 1 cask CONSTOR®RBMK-1500/M2 with tight spent fuel assemblies is 18 days per NPP unit. 40 casks shall be loaded with tight spent fuel assemblies and transported to the ISFSF-2 for storage annually. Handling of damaged spent fuel assemblies requires longer period of time than handling of tight spent fuel assemblies.</p> <p>Handling of damaged fuel at Unit 1 will start in mid-2020. When the last cask at Unit 1 will be loaded, the DFHS equipment will be decontaminated and transferred to Unit 2.</p> <p>Transportation of the last CONSTOR®RBMK-1500/M2 cask from Unit 2 with damaged fuel to the ISFSF-2 is planned to be completed in mid-2022.</p>
40	Belarus	General	p. 8 Summary	<p>Section “Summary”, as well as Article 16 (1) of the National Report contains information about fulfillment of the obligations by the Republic of Belarus, including obligations not only within Convention of Nuclear Safety (CNS), but also Convention on Environment Impact Assessment in a Transboundary Context (Espoo Convention). This information is not relevant in the context of CNS National Report, taking into the account para 5 of the INFCIRC/572/REV.6, stating that “Preparing for the National Report according to Article 5 of the</p>	<p>We strongly disagree with the statement of Belarus (“<i>This information is not relevant in the context of CNS National Report...</i>”) and consider it as unfounded. Chapter 16 (1) of Lithuanian National Report, dedicated to describe implementation of provisions of Article 16 of CNS, provides information on actions taken by Lithuania in the area of emergency preparedness and identifies the potential problems / challenges with implementation of emergency plans in case of radiological emergency at Belarusian NPP, which is constructed only 20 km from European Union border and only 40 km from Lithuanian capital Vilnius. As defined in INFCIRC/572/Rev6 guidance related to Article 16 (1), 6th indent as well as guidance related to Article 16 (3), 2nd indent, the National Report shall describe “<i>International arrangements, including those with neighbouring States, as necessary.</i>“. Based on the above, National Report provides information on Lithuania’s international arrangements and main results, stemming from international cooperation.</p> <p>Since the planning of emergency preparedness measures highly depends on such factors as distance to populated areas and other factors considered in a siting</p>

				Convention implies a process of self-assessment of the implementation of the obligations under the Convention...”.	process as well as on design and potential operational features of nuclear installation, information in Chapter 16(1) was provided in integrated manner to reflect complexity of problem, which cannot be seen (and solved) in isolation and disregarding preceding processes of site selection, design and potential operation. This also related with the “assessment of the likely safety impact on their own territory of the nuclear installation”, which has to be made by Contracting Parties in the vicinity of nuclear installation, likely to be affected by that installation (see Article 17 (iv) of CNS).
41	Canada	Article 10	Page 39	Describe how the safety culture within the regulatory authority (VATESI) is assessed? Are there any additional examples of how safety culture is established within VATESI?	Procedure for Development of Organizational Culture is established and documented within VATESI integrated management system. It defines safety and security culture monitoring, assessment and improvement measures. The main part of assessment is annual survey of VATESI staff. This survey is anonymous. Questions of the survey are prepared taking into consideration all important safety culture attributes defined in the IAEA safety standard GS-G-3.1 Application of the Management System for Facilities and Activities. Results of the survey are analyzed and documented in the report. Annual discussion is organized about the results of survey, existing situation, trends, areas for improvement and possible improvement measures.
42	Canada	Article 15	Page 68	Besides whole body counting; is any additional internal dosimetry and/or confirmatory monitoring being performed on INPP workers (such as urine bioassays or thyroid monitoring)?	There are no other means used on the routine basis for internal dosimetry besides whole body counting. Due to characteristics of radionuclides originated during the INPP operation (Co-60 and Cs-137 are the main contributors to the dose) the whole body counting is sufficient for internal dosimetry. However there are capabilities in the country for dose evaluation based on the activity measurement of biological sample, which might be used in special case e.g., accident, which may result in intake of alpha emitters.
43	Canada	Article 15	Pages 69, 75	Is there independent environmental monitoring being performed around the INPP site by any regulatory authority in Lithuania? If yes, what is the frequency, and are the results communicated to the public?	Environmental Protection Agency (EPA) is responsible for performing of National radiological monitoring of the environment. Two types of measurements are performed – automatic monitoring and measurements of samples in laboratory. Lithuania’s automated radiation monitoring system consists of 43 air radiation monitoring stations and 3 water radiation monitoring stations. 5 of air radiation are located nearby INPP site. The measurements in the stations are carried out

				<p>every 10 minutes, the results are published on EPA website http://radis.gamta.lt/ and automatically sent to the database of European Union (EURDEP).</p> <p>Surface water, bottom sediments and aquatic biota samples are taken from the Drūkšiai lake (the lake used for cooling) 4 times a year. On routine basis analysis of activity concentration is performed in laboratory: Cs-137, Sr-90 and Co-60 in water samples, Cs-137, Sr-90, K-40 and Co-60 in bottom sediments and aquatic biota.</p> <p>Non-automated air aerosol sampling station is located in Utena, about 70 km form INPP. Activity concentrations of Be-7, Cs-137, Cs-134, and I-131 in air filters are measured in laboratory of EPA.</p> <p>Annual results of measurements are placed on the website of EPA (http://gamta.lt/cms/index?rubricId=7a9a8309-05de-4580-836c-cfff1327d18b) together with monitoring data from other localities.</p> <p>Radiation Protection Centre (RPC) performs monitoring of foodstuffs, vegetation and drinking water and National Food and Veterinary Risk Assessment Institute (NFVRAI) under State Food and Veterinary Service performs monitoring of raw foodstuffs and feeding stuffs. RPC gets all data from other institutions and analyses them, publishing reports and presenting them on website.</p> <p>Frequency of sampling and measurements are indicated in the Order of the Minister of Health No V-312 (2004) "On the Requirements for Carrying out a "Food Basket" Radiological Monitoring and Requirements for Monitoring of Radionuclide precipitation and Population dose equivalent of the exposure received from the environment in Kupiskis and Ignalina district" (https://e-seimasx.lrs.lt/portal/legalAct/lt/TAD/TAIS.234661?jfwid=166ic8gh97)</p> <p>All data from the environmental radiological monitoring are periodically sent to the EC using appropriate software and reports are presented to the public on Radiation protection Centre website www.rsc.lt.</p>
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44	Canada	Article 16	Pages 83, 86	<p>Noting that the 7 RM highlighted the importance of developing cross-border emergency planning zone definition and management, as well as bilateral arrangements to coordinate and exercise emergency preparedness and response capabilities; please clarify if Belarus authorities participated in the May 2018 national table-top emergency exercise on civil protection actions in case of a nuclear accident at the Belarusian NPP.</p>	<p>May 2018 exercise was of preliminary nature and without participation of Belarusian authorities' representatives. Invitation of representatives of neighbouring countries to the future emergency exercises shall be considered.</p>
45	Canada	Article 8	Pages 28-29	<p>The regulatory authority (VATESI) highlights measures taken to develop and maintain human resources and competence. Are there specific examples that can be provided of the approaches taken towards knowledge management? Have these approaches been formalized? VATESI indicates that a long-term (5 year) evaluation of functions and workload was undertaken in 2017, and an action plan established. What is the frequency for VATESI to review the action plan and also to regularly conduct long-term evaluations to ensure sustainability of the human resources program?</p>	<p>Main issues of personnel management, including knowledge management, are formalized within the following rules of procedure of VATESI integrated management system, describing approach to knowledge management:</p> <ol style="list-style-type: none"> 1) Rules of Procedure for Personnel and Knowledge Management. It establishes management procedures, such as issuing orders concerning wages, days off, etc., performance evaluation, measures of motivation system, describes main measures of knowledge management, such as practical measures for sharing information within organization, creating databases, organizing internal training courses, etc.; 2) Rules of Procedure for Planning of Human Resources. It regulates procedure for management turnover of personnel, tool for working time tracking, different methodologies for evaluating how many and what kind of employees are needed in long-term perspective. Regarding knowledge management, a plan of measures for compensation of departure of staff (positions that are deemed as making highest impact upon leaving and most difficult to replace) is an important tool. Particular measures of knowledge transfer are described in the this plan, such as detailed documentation of certain procedures, creation of databases, organizing work in a manner allowing employees to familiarise themselves with functions of their colleagues in order for them to be able to replace them for short or long term leave or in case of merging positions; 3) Statute of Training of VATESI Personnel. It describes methods of training, methods of evaluation of competence, conclusion of 5-year individual plans for improvement of competence, detailed procedures for training new employees and evaluation of their suitability to start working individually, periodical (every five

					<p>years) evaluation of knowledge of inspectors, procedures of organizing training, etc.</p> <p>Pursuant to Rules of Procedure for Planning of Human Resources, a comprehensive (full scope) evaluation of human resources needs is carried at least every 5 years. It needs to be clarified, that the plan itself, as indicated in page 28 of the report, is not a 5 year plan; 5 year term is set for evaluation and planning. Measures within the plan have various time limits. The plan, if not completed upon other periodical evaluation, shall be reviewed during this evaluation.</p>
46	Canada	Article 8	Page 30	<p>How often are surveys of stakeholders, including the general public, conducted? How are survey topics chosen? What are the methods used to deploy surveys, and respond to surveys? How are survey results incorporated into continuous improvement initiatives at VATESI? / VATESI states that surveys of stakeholders, including the general public, are organized, to improve transparency and ensure feedback. This could be a good performance that more regulators should consider as part of continuous improvement.</p>	<p>VATESI has developed internal management procedure for stakeholders feedback monitoring. According to this procedure, general public surveys conducted once in two-year period, for other stakeholders (e.g. licence holders, government institutions) every year. For the general public the topics regarding sufficient provision of information about the safety of the nuclear facilities in Lithuania, public opinion about Ignalina Nuclear Power Plant safety supervision – is it conducted properly or not, public awareness of the decommissioning activities are monitored. For licence holders main topics are about quality of services, for government institutions – evaluation of interinstitutional cooperation.</p> <p>General public surveys conducted by suggested methodology by opinion research companies, using face-to-face method and prepared questionnaires through the whole territory of the state and in special residents groups living in a vicinity of nuclear facilities. Surveys of licence holders and government institutions conducted mainly online with request to fill questionnaires.</p> <p>Survey results are used as the indicators to continuous management system improvement and to measure level of achievement of the annual tasks of the regulatory authority.</p>
47	Canada	Article 9	Page 35	<p>Does VATESI perform compliance verification activities to ensure that the licence holder maintains transparent communications with authorities,</p>	<p>VATESI perform compliance verification activities using such regulatory tools:</p> <ul style="list-style-type: none"> • Reviewing License holder’s annual reports about nuclear safety; • Reviewing License holder’s unusual events reports, which shall be submitted in accordance with Nuclear Safety Requirements BSR-1.4.4-2019 "Use of the Experience of the Individuals Operating in the Nuclear Energy Industry";

				public, press and local society? How is compliance verified?	<ul style="list-style-type: none"> • Reviewing License holder’s procedure “Internal and external Communication”, as well as Licence holder’s internal audit reports about implementation of communication process. Both documents shall be submitted to VATESI in accordance with Nuclear Safety Requirements BSR-1.4.1-2016 “Management system“. License holder’s procedure “Internal and external Communication” include provisions related to public participation in decision making process of the most important authorization decisions related to nuclear safety as pointed out in Report.
48	Canada	General	Summary	What activities continue to ensure preparedness in the event that there is a licence application for a new NPP? / In Lithuania's 7 RM report, a challenge was noted "to be prepared for construction of a new NPP". There was not an update in the 8 RM report on whether activities are on-going, to ensure readiness in the event that there is a licence application for a new NPP received.	All activities related to the preparation for the licencing of the new NPP have been suspended since the project of new NPP (Visaginas NPP) is cancelled. Moreover, the National Energy Independence Strategy (2018) does not foresee development of nuclear power in Lithuania. The Strategy is focused on the renewable sources of energy and energy efficiency. Thus, the new NPP project cannot be initiated without changes in the State energy policy and National Energy Strategy.
49	Finland	Article 10	page 39	VATESI has integrated safety culture into the management system. Has VATESI made any self-assessments (or external assessments) concerning its safety culture and development needs? If yes, what were the most significant findings?	<p>Procedure for Development of Organizational Culture is established and documented within VATESI integrated management system. It defines safety and security culture monitoring, assessment and improvement measures.</p> <p>The main part of assessment is annual survey of VATESI staff. This survey is anonymous. Questions of the survey are prepared taking into consideration all important safety culture attributes defined in the IAEA safety standard GS-G-3.1 Application of the Management System for Facilities and Activities. Results of the survey are analysed and documented in the report.</p> <p>It can be underlined that a total majority of replies in the survey provide positive opinion about safety and security culture at VATESI. However, important trends and areas for possible improvement are also identified. As a consequence of these results appropriate decisions are made to cope with the areas which has potential for improvement.</p>

50	Germany	Article 10	p. 36	<p>In the National Report is stated “The applicant or the license holder have a right to involve technical support organizations and external experts, specialists, and consultants for carrying out the analysis and justification of nuclear safety and for preparing other related documents.” Could Lithuania please clarify which requirements these TSOs, experts and specialists have to meet?</p>	<p>The services, which may have impact on safety, , shall be considered as product, important to safety. In such case, the provisions of Section 1 “Supply of product, important to safety” of Chapter VI of Nuclear Safety Requirements BSR-1.4.1-2016 “Management System” shall be applied for product supply. The direct responsibility of implementation and transfer of these requirements to Supplier rests on licence holder. Above requirements includes provisions regarding management system of supplier, sufficiency of technical, financial and human (including qualification) resources, product control, etc.</p>
51	Germany	Article 19	19(7), p. 113	<p>In the National Report the establishment of a permanent Commission of Unusual Events and Operating Experience is stated. Could Lithuania please report on the composition of this Commission?</p>	<p>The Commission of Unusual Events and Operating Experience (Commission) consists of the following permanent members from the different divisions of VATESI, selected to cover different aspects of regulated activities: one member from the Safety Analysis Division, one member and secretary of the Commission from the Operating Experience Analysis Division, one member from the Nuclear Materials Control and Physical Security Division, one member from the Radioactive Waste and Management Division, one member from the System and Components Division, one member from the Transportation and Radiation Safety Division, one member from the Decommissioning Division and one member from the Surveillance Division. Head of VATESI is a Chairman of Commission. In addition, specialists from different fields are invited to participate in the meetings in order to solve specific issues related with events occurred at nuclear facilities.</p>
52	Germany	Article 7	7(2)I, p. 19	<p>In the National Report it is stated “Overview of the process of establishing and revising regulatory requirements, including the involvement of interested parties”. Could Lithuania please clarify how long the public can comment on the drafts? Could Lithuania please</p>	<p>The general term for providing comments is 10 business days. If the draft is 10 or more pages, 12 business days for draft Resolution of the Government of Draft Law and 15 business days for draft orders of the Head of VATESI. In exceptional cases, reviewers may be asked to provide comments urgently, i.e., in 5 business days. Institution, drafting the document, may always set longer terms. Argumentation regarding evaluation of comments from interested parties is provided in a document called “coordination table”. It includes the following: name of legal or natural person providing comments, the comments and, in case the comment is declined, argumentation for declining it. The coordination table is</p>

				elaborate on the process of evaluating these comments?	published online (on Information System of Legal Acts) together with the draft document, if the draft needs to be presented for further or repeated consideration of interested parties. If the draft is the final stage of the drafting procedure, it can also be published, as mentioned above, or the coordination table together with final draft is provided for the person or entity who provided the comments. All comments need to be considered, but the final decision on whether to take account of them and amend the draft lies with the institution drafting the document.
53	Japan	Article 10	P38 meetings between Ignalina NPP and Regulatory Body top managers	Is the minutes of the meeting published? Are the meetings held with the top managers of nuclear facilities other than nuclear installations?	The existing practice of regular quarterly meetings is formed only between the top management of nuclear safety regulator and State Enterprise Ignalina NPP (the only nuclear facilities' operator in Lithuania). The minutes of the meetings are internal documents and are not published. However, information about results of the meeting and official extract from the minutes of the meeting is presented to the interested parties when needed.
54	Japan	Article 11.2	p 47	Your country report shows that, under the Article 13 of the Law on Nuclear Energy, your country organizes educational programs to train nuclear energy and safety specialists. Since the new version of the Nuclear Safety Requirements BSR-3.1.2-2017 was adopted by VATESI in order to supplement the requirements related to seismic hazard (your country report, page 14), can you please tell us whether you organize educational programs to train specialist in seismic hazard?	There are no formal programs in Lithuania to train specialists in seismic hazards. However, there are undergraduate and postgraduate educational programs on geophysics and natural hazards, for example at Vilnius university.

55	Japan	Article 12	p 50	<p>Your country report shows that managers of Ignalina Nuclear Power Plant continue to support “the blame free work culture” to ensure improvement in relation to human factors and organizational issues. It seems that VATESI establish a regulatory framework to ensure no blame culture based on the IAEA safety standards GSR part 2. Did you establish a regulatory framework to promote no blame culture?</p> <p>It is much appreciated if you could share your experiences in the field of promoting no blame culture.</p>	<p>The general no blaming culture aspects are specified in the Nuclear Safety Requirements “Management Systems” (BSR-1.4.1) chapter II “Safety culture and security culture”.</p> <p>Pursuant Paragraph 34 (BSR-1.4.1), the licensee holder shall provide its employees, to have opportunities to express their personal views and to give suggestions about the safety matters, and inform the senior management about safety issues and process improvement possibilities. The licensee holder shall maintain such work environment where any employee is free to raise safety-related questions with no adverse consequences.</p> <p>The management members at all levels of the licensee holder shall promote and encourage such behaviour and attitude of workers towards safety that enhances safety culture and security culture, shall be role models for others in how to apply the organisation’s management system and the values fostered therein, and shall demonstrate disapproval of actions and conditions that are not compatible with safety (Paragraph 27 BSR-1.4.1).</p> <p>Pursuant Paragraph 82, the management members at all levels of the licensee holder shall promote involvement of employees in the improvement of processes and encourage them to report safety issues to the senior management.</p> <p>In accordance with Paragraph 25 of Nuclear Safety Requirements “Use of Operating Experience in the Field of Nuclear Power” (BSR-1.4.4-2019), the licensee holder shall establish measures encouraging employees to report unusual events, conditions causing threat to safe operation of the structures, systems and components important for safety, also conditions leading to higher possibility of error.</p> <p>In order to promote no blaming culture VATESI reviews and agrees on management system procedures related with event reporting as well as safety culture development, looking what kind of measures takes the licensee holder to promote employees to report on events. VATESI supervise safety culture development process at the Ignalina NPP.</p> <p>The complexity of requirements non directly related with non-blaming culture allows to achieve non blame culture environment at Ignalina NPP.</p>
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56	Japan	Article 12	P50 medical alcohol tests	What is the criteria of the medical alcohol tests?	The legal limit of alcohol content in the blood is defined in the internal SE Ignalina NPP procedures and is 0.15 ‰ (or in grams per litre).
57	Japan	Article 13	P55 the inspections of VATESI	How much authority is given for the inspectors? For example, can inspectors order the reactor shut down when an urgent order is needed during the regular inspections?	<p>Pursuant to the Article 6 Paragraph 4 of the Law on Nuclear Safety, it is mandatory for the employee of the VATESI to order representatives of the economic entity to eliminate a violation immediately if, while at the premises or activity location of the economic entity, the aforementioned employee finds the violation that, if not eliminated, may cause damage due to the hazardous effect of ionising radiation on employees of the nuclear installation, the population or their property and/or the environment.</p> <p>In addition, pursuant to the Article 36⁹ of the Law on Public Administration and Paragraph 19 of the Order No. 22.3-106, 24th of October, 2011, approved by the Head of VATESI “On the Approval of Nuclear Safety Requirements BSR-1.1.4-2017 “Rules of Procedure for Applying the Enforcement Measures Set by the State Nuclear Power Safety Inspectorate”, it is mandatory for the employee of the VATESI to immediately inform authorised representative of the economic entity, individual referred to in the Article 8 Paragraph 1 of the Law on Radiation Protection, radiation protection officer, dosimetry service regarding insignificant violations of legal acts in order to eliminate the aforementioned violations during the inspection carried out by the employee of the VATESI.</p> <p>In other cases when safety violations are identified the employees have the right to propose the application of specific mandatory requirements to the Head of VATESI. The Head of VATESI has the right to adopt the decision to issue mandatory requirements to legal entities. Types of mandatory requirements:</p> <ol style="list-style-type: none"> 1. to eliminate identified violations of the nuclear safety requirements and rules; 2. to suspend works within the time-limits set by the Head of VATESI and/or to shut-down the nuclear reactor; 3. to decrease nuclear reactor’s power; 4. to halt the operation of other equipment or activities. <p>The employees authorised by the Head of VATESI have the right to issue protocols of administrative offenses, to investigate the cases of administrative offenses, to impose administrative penalties and administrative measures to natural persons in cases set out in the Code of Administrative Offenses of the Republic of Lithuania as well.</p>

58	Japan	Article 15	P74 inspections about radiation protection	Are inspections about radiation protection done as unannounced inspections?	Mainly all inspections, including inspections in the radiation protection area, are done in planned and announced manner, as far as Law sets corresponding requirement. In addition to planned inspections unplanned inspections which may be announced or unannounced can be performed as well. The legal basis for conducting unplanned inspections are laid down in the Law on Nuclear Safety (Article 28 Paragraph 1 ¹), in the Law on Radiation Protection (Article 8 Paragraph 4) and in the Law on Public Administration Article 36 ⁴ Paragraphs 12-13. These unannounced inspections may be reactive as well, it means the inspections that are performed reacting to unusual events or important information about possible violations.
59	Japan	Article 15	p64, 3rd paragraph	In this paragraph, it is mentioned that the principal requirement is that the radiation protection of contractors personnel shall be the same scale as of permanent workers of the NPP. It might be difficult to manage the dose rate of each contractors because they might change their working places. How do employers calculate exact dose rate of each workers? (In Japan, there is a system of manage the dose rate of workers that is implemented by government agencies)	There is the national dose register (the State Register of Sources of Ionizing Radiation and Occupational Exposure) in Lithuania where all the individual doses are registered. To keep doses in the register up to date there is a system of monitoring document, issued by Radiation Protection Centre for every contract worker, which is prescribed in Lithuanian hygiene norm HN 73:2018 “Basic standards for radiation protection”. Only one monitoring document may be issued at one moment. Before the beginning of works in the controlled area of nuclear facility, outside worker shall submit this document, which includes the doses for consecutive 5 years, to the operator of nuclear facility. After the end of the job, the monitoring document with the records of additional dose received in the controlled area shall be returned to the Radiation Protection Centre, where doses are transferred to the national register.
60	Japan	Article 15	P66 Table 15.1	Why does the dose limits for students aged 16 and 18 years defined?	Dose limits for students aged 16 and 18 years were defined in Lithuanian Hygiene Standard HN 73:2018 “Basic Standards of Radiation Protection” because this legal document was prepared implementing the requirements of Council Directive 2013/59/Euratom of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom (Article 11, Dose limits for apprentices and students).

61	Japan	Article 16	p79, 5th paragraph	There appears to be no mention of complex disaster (such as radiation accident caused by earthquake). How do they prepare for it?	The possible threats are assessed and described at National Risk Assessment separately, but the national authorities are participating periodically at the international exercises (e.g. Crisis Management Exercise organized by NATO), where the preparedness and response for the complex disasters are tested. Analysis of the postulated accidents at INPP that might have an off-site radiological impact, including those of very low probability of occurrence (e.g. <u>beyond design basis earthquake</u> and large commercial aircraft crash accompanied with large-scale fire) is performed. The results of this analysis show that even in case of accidents of very low probability of occurrence, the annual effective dose for population is far below limits when off-site response is needed.
62	Japan	Article 16	p79, 5th paragraph	I think that many people in various languages live in Lithuania. Will evacuation guidance be conducted in multinational languages? Please let me know if you provide any additional information for non-Lithuanian speaking people.	Yes, the information of evacuation and other protective actions is prepared and available also in English, Russian: ✓ https://www.lt72.lt/go.php/eng/How-to-behave-in-the-event-of-an-accident-in-the-nuclear-power-plant ✓ https://www.lt72.lt/go.php/rus/Kak-vesti-sebja-esli-proizoshla-avarija-na-atomnoj-elektrostantsii- Municipalities, with big fraction of Polish speakers prepared the information in Polish language as well.
63	Japan	Article 16	p 78, 3rd paragraph	How does the VATESI predict possible emissions and pathways of radioactive materials? And will the protective actions differ according to the predicted pathway?	In case of nuclear or radiological emergency, VATESI activates Emergency Response Centre (ERC). For prediction of possible emissions and pathways of radioactive materials (evaluation of source terms and release characteristics) VATESI receives necessary information directly from INPP. In addition, VATESI ERC has an on-line data link with INPP, which enables possibility for VATESI ERC personnel to observe values of the most important safety parameters of INPP in case of emergency. For example, water temperature and level in the Spent Nuclear Fuel (SNF) storage pools as well as radiation level in the SNF storage pool's halls and other compartments of INPP. VATESI ERC has also access to the data of on-site radiological monitoring network of INPP, including the data of discharges of radionuclides into environment through the stack and data of local weather conditions. Source terms of several pre-calculated worst-case scenarios are available for INPP as well. This includes accidents with heavy damage of SNF in the SNF storage pools. For example, source terms due to damage of SNF in SNF storage pools in case of aircraft accident and beyond design earthquake (also

					<p>see answer to Q65 (QID26160)). In case of nuclear or radiological accidents at NPP's in other countries, certain evaluations of possible source terms are available at VATESI.</p> <p>VATESI is not responsible for decision making concerning protective actions, according to the State Residents Protection Plan in Case of a Nuclear or Radiological Accident. VATESI provides the information about evaluation of source terms and release characteristics to the state institutions (Environmental Protection Agency and Radiation Protection Centre) that are responsible for prognosis of dispersion and deposition of radionuclides released into environment and evaluation of exposure of people and environment. It should be noted that in the urgent response phase of emergency, decision on implementation of protective actions is based on declared class of emergency rather than on results of decision support tools. In the later phase of emergency, the necessity to implement protective actions is based on environmental monitoring data and decision support tool's results.</p>
64	Japan	Article 16	p79, 5th paragraph	<p>It is described that evacuation might be carried out in three direction in the last sentence of this paragraph. Please describe more detail about the determining process about the evacuation direction. In addition, is there any support plan for people who evacuated to other municipalities/countries?</p>	<p>As it is described on The State Plan of Public Protection in Case of Nuclear Accident (Chapter "Inhabitants Evacuation", article No 135), the evacuation directions were determined according to the historical data analysis of the most popular winds in region, done by the Lithuanian Hydrometeorological Service. According to the same Plan mentioned above, there is also described, that during the emergencies the Lithuanian Hydrometeorological Service has in intervals to renew and to provide the accurate weather/wind directions information to the institutions, which are responsible for evacuation. It should be mentioned that also in the same Plan it is described the social, psychological, health care support for the evacuated people, taking into account the support of continuous education process for the evacuated pupils.</p>

65	Japan	Article 16.1	P82 work on evaluation of consequences of nuclear and radiological accidents	In the situation that there is no nuclear fuel on the INPP, what is a main assessment point of the evaluation of "large commercial aircraft crash and extreme seismic events"?	<p>INPP reactors of Unit 1 and Unit 2 are without fuel since December 2009 and February 2018 respectively. The Spent Nuclear Fuel (SNF) from reactors is transferred to the SNF storage pools of the units. About 6000 of the SNF assemblies were stored in the SNF storage pools of both units at the time of preparation of the CNS National Report. The complete defueling of the SNF storage pools of both units is scheduled to be completed by mid 2022. All SNF will be loaded into casks and stored in two separate Interims Spent Fuel Storage Facilities located on the INPP site.</p> <p>According to the Law on Nuclear Energy, licensee is obligated to perform the analysis of consequences of possible nuclear and radiological accidents at licensee's nuclear installation and facilities. The requirement established in the Law on Nuclear Energy is based on IAEA General Safety Requirements GSR Part 7, Requirement 4 and related with hazard assessment of nuclear installations and facilities for establishing arrangements for preparedness and response for a nuclear or radiological emergency. Performing this analysis, the postulated accidents that might have an off-site radiological impact, including those of very low probability of occurrence (beyond design basis earthquake and large commercial aircraft crash accompanied with large-scale fire) shall be assessed. The outcomes of the analysis would be used to plan on-site accident mitigation measures and off-site population protection measures that are established in the State Residents Protection Plan in Case of a Nuclear or Radiological Accident. Scope of analysis includes nuclear installations and facilities such as SNF storage pools, reactors (graphite of the reactor core), interim SNF storage facilities, solid radioactive waste treatment and storage facilities and bitumen solidified radioactive waste storage facility.</p>
66	Japan	Article 19.8	P115 4th paragraph A storage facility ...for 60years storage.	After the 60 years storage, how will the waste be disposed?	Here is mentioned a design lifetime for the storage facility. With the operation of the Near Surface Repository the waste will be treated as it is further stated in the Report: "Conditioned waste will be disposed of in the Near Surface Repository (NSR) (B25 Project)", i.e. containers with the short-lived low and intermediate level radioactive waste delivered from the INPP, including the cemented waste storage facility, will be grouted by using the concrete produced in the Technological Building of the NSR (dedicated for verification, storage and conditioning (when required) of radioactive waste packages prior disposal) and

					then delivered to the vaults for disposal. Containers are transported to the vaults only after the exit control is performed.
67	Japan	Article 7.2.2	p 20	<p>The website of State Enterprise Ignalina Nuclear Power Plant (https://www.iae.lt/en/activity/decommissioning/public-participation-in-decision-making/326) shows that the enterprise also provides public participation.</p> <p>Does the enterprise provide public participation under the Nuclear Safety Requirements BSR-1.1.5-2017? If it is so, is there any duplication between the public participation process provided by VATESI and the same process provided by the licence holder?</p>	<p>Yes, pursuant to the Nuclear Safety Requirements BSR-1.1.5-2017 “Rules of Procedure for Public Participation in Decision-making in the Area of Nuclear Energy” the licence holder is obligated to notify the public on processes to be undertaken by the license holder regarding which the public may participate in the decision making process.</p> <p>Partially it could be stated that the information related to the notification of the public on commencement of the authorisation process is duplicated by both the regulatory body and the licence holder. However, the licence holder is obligated to provide the possibility for the public to get acquainted and comment on the documents submitted to the regulatory body as part of the to be undertaken activity in the field of nuclear energy, including taking into consideration of the submitted proposals and comments.</p> <p>Regarding the overall process for public participation, see answer to Q68 (QID26141).</p> <p>It is important to note, that the procedure is set this way, because:</p> <ol style="list-style-type: none"> 1) pursuant to Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, the public needs to be allowed to participate in the decision making process as early, as possible; 2) Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters requires the public participation procedures to include reasonable time-frames for the different phases, allowing sufficient time for informing, therefore ensuring real and effective participation; 3) taking into account the factors mentioned above, to reduce possibility of major problems to arise at the end of the process and therefore to lengthen the process.

68	Japan	Article 7.2.2	p 20	<p>Your country report shows that, in Lithuania, public can participate in key decisions on nuclear power under the Nuclear Safety Requirements BSR-1.1.5-2017.</p> <p>Can you please provide more details on the public participation process?</p> <p>Your country report (page 29-30) and VATESI website (http://www.vatesi.lt/index.php?id=576&L=1#c3151) provide general description, however, we would like to know, for example, 1) whether people can send their opinions via e-mails, 2) whether VATESI's answers are open to the public via website, 3) public comment period etc..</p>	<p>The process of public participation in decision-making process is as follows:</p> <ol style="list-style-type: none"> 1) after receiving application documents and accepting it, VATESI makes an announcement on their website that the application documents are received and accepted for evaluation; 2) within two working days of this announcement, the applicant announces, that the application documents are accepted by VATESI and that the public may ask for familiarising with them. The term for the public to provide their comments to the economic entity is 1 month; 3) the economic entity needs to consider all proposals, information, analyses, opinions received. The applicant shall provide the regulatory authority (VATESI) with the results of such consideration – amended documents, if they decide to take account of the comments, and comments together with argumentation why they were rejected if so; 4) at the end of the process of deliberation of all safety documents provided with the application, after VATESI announces there is a draft decision available, the public may comment on the decision and related final safety documents. If VATESI decides to take account of the comments of the public, the draft decision may be amended or there could be additional inquiries to the applicant. If the comments are rejected, the argumentation shall be published on VATESI's website together with the final decision; 5) VATESI's decision may be brought to court by the public on the grounds of failing to adhere to this procedure (not ensuring proper participation in decision-making process). <p>Answering the specific questions:</p> <ol style="list-style-type: none"> 1) yes, pursuant to Paragraphs 14 and 18 of Nuclear Safety Requirements BSR-1.1.5-2017 “Rules of Procedure for Public Participation in Decision-making in the Area of Nuclear Energy”, opinions may be submitted via e-mail; 2) yes, pursuant to Paragraph 19 of Nuclear Safety Requirements BSR-1.1.5-2017 “Rules of Procedure for Public Participation in Decision-making in the Area of Nuclear Energy”, information about assessment proposals of the public, including the reasons for not taking the proposals into account or taking them into account only to a certain extent, together with the final decision shall be published by VATESI's website not later than within 3 business days of making the decision; 3) pursuant to Paragraph 4 Article 39(1) of the Law on Nuclear Safety, the public may provide comments for the applicant within one month. Pursuant to Paragraph
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					<p>6 Article 39(1) of the Law on Nuclear Safety, the public may provide comments for draft decision and final documents within:</p> <ul style="list-style-type: none"> - 2 months in case of decisions regarding siting and licences for construction, operation, decommissioning of nuclear installation and supervision of a closed radioactive waste repository; - within 1 month in case of decisions regarding permits for first delivery of nuclear fuel to the site of nuclear power plant and for delivery of nuclear and (or) nuclear fuel cycle materials to the site of other nuclear installation and for the first test while using nuclear and (or) nuclear fuel cycle materials in such nuclear installations (when these permits are issued for holder of joint construction and operation licence).
69	Japan	Article 7.2.3	p 22, 2nd paragraph	Is the inspection's report or the plan of implementation of corrective measures disclosed to the public? (Would you provide information about what information to be disclosed in inspection?)	<p>The information provided in the inspection reports or the plan of implementation of corrective measures may be disclosed to the public in case if the corresponding information doesn't have any restrictions on the use (for example it doesn't constitute commercial (industrial) or professional secrecy, a state secret or an official secret. The information may be provided to stakeholders on request.</p> <p>During inspection, the authorised employees of the economic entity subject to the inspection shall present all information necessary for achieving the goal of the inspection. The head of the inspection commission shall be notified if sensitive information is going to be presented. Such information shall be managed in line with legal acts and/or contracts, if any, concluded between the economic entity and the VATESI establishing restrictions on the use of the information presented by the economic entity. If the economic entity discloses the information which constitutes a state secret or an official secret, the economic entity and the inspection commission's head shall be guided by legal acts laying down the procedure of work with classified information.</p>
70	Japan	Article 8	p 29, 2nd paragraph	Do you have any plan to revise the IMS corresponding to the IAEA Safety Standards GSR (Part2) which supersedes IAEA Safety Standards Series No. GS-R-3?	Information in the report was not properly updated. VATESI integrated management system (IMS) is established, implemented and continually improved based on the latest IAEA and ISO management system standards. So VATESI IMS was also revised in line with the IAEA GSR Part 2 general safety requirements Leadership and Management for Safety and ISO 9001:2015 Quality Management System Requirements.

					Specific GSR Part 2 requirements applicable for the documented process are indicated in each VATESI IMS procedure.
71	Japan	Article 8.1	P29 communication with the public	Please explain how long the comments period for one decision is. What is the method for submitting comments?	<p>Pursuant to Paragraph 4 Article 39(1) of the Law on Nuclear Safety, the public may provide comments for the applicant within one month.</p> <p>Pursuant to Paragraph 6 Article 39(1) of the Law on Nuclear Safety, the public may provide comments for draft decision and final documents within:</p> <ul style="list-style-type: none"> - 2 months in case of decisions regarding siting and licences for construction, operation, decommissioning of nuclear installation and supervision of a closed radioactive waste repository; - within 1 month in case of decisions regarding permits for first delivery of nuclear fuel to the site of nuclear power plant and for delivery of nuclear and (or) nuclear fuel cycle materials to the site of other nuclear installation and for the first test while using nuclear and (or) nuclear fuel cycle materials in such nuclear installations (when these permits are issued for holder of joint construction and operation licence). <p>Pursuant to Paragraphs 14 and 18 of Nuclear Safety Requirements BSR-1.1.5-2017 “Rules of Procedure for Public Participation in Decision-making in the Area of Nuclear Energy”, the comments may be submitted in writing in the following ways: by post, fax (if available), e-mail, on the internet website (in those cases when such a possibility is provided by the economic entity or VATESI respectively), served personally or in other ways. Where a natural person due to inability to write cannot submit proposals in writing, such person may submit recorded oral proposals (e.g., provide their audio or video record) or where a person has no possibility to make the record of the proposals – they shall be recorded for the person (e.g., their audio or video record shall be made upon arrival at VATESI). Comments may also be provided during public hearings, if such are organized. However, it is not mandatory to organize public hearings. Public hearings may be organised on the initiative of the economic entity (regarding initial the application documents) or the State Nuclear Power Safety Inspectorate (regarding the final draft decision and final application documents) when there are numerous proposals, in order to provide a quicker and more effective public participation in the decision-making process.</p>

72	Japan	Article 8.1	p 30	<p>Your country report shows that, in Lithuania, in order to improve transparency and ensure feedback, the nuclear regulatory body, VATESI, organizes surveys of stakeholders, including the general public. This activities might be unique.</p> <p>It seems that you have established a continuous improvement process of openness and transparency of regulatory activities.</p> <p>Can you please provide more details on the surveys of stakeholders? It is much appreciated if you could share your experiences.</p>	<p>VATESI has developed internal management procedure for stakeholders feedback monitoring. According to this procedure, general public surveys conducted once in two-year period, for other stakeholders (e.g. license holders, government institutions) every year. For the general public the topics regarding sufficient provision of information about the safety of the nuclear facilities in Lithuania, public opinion about Ignalina Nuclear Power Plant safety supervision – is it conducted properly or not, public awareness of the decommissioning activities are monitored. For licence holders main topics are about quality of services, for government institutions – evaluation of interinstitutional cooperation.</p> <p>General public surveys conducted by suggested methodology by opinion research companies, using face-to-face method and prepared questionnaires through the whole territory of the state and in special residents groups living in a vicinity of nuclear facilities. Surveys of licence holders and government institutions conducted mainly online with request to fill questionnaires.</p> <p>Survey results are used as the indicators to continuous management system improvement and to measure level of achievement of the annual tasks of the regulatory authority.</p>
73	Japan	Article 8.1	P28 3rd paragraph Development and maintenance of human resources of the regulatory body over the past three years	<p>Please explain how effective the three tools about the Planning of Human Resources were. Does that mean that the number of part-time workers is increased or some staffs have more excessive work?</p>	<p>Procedure for management turnover of personnel is updated every year and allowed VATESI to implement several measures to improve preparation for turnover, such as, for example, more clear and detailed description of certain procedures.</p> <p>Tool for working time tracking is used for gathering information for the next long-term evaluation of human resources needs (needs to be carried out no later than in 2022, i.e. in five years after evaluation in 2017). Additionally to a weekly review of the information provided by employees, done by managers to evaluate, if there are any problems, the information is summarized yearly to track the quality of gathered information and to see emerging trends. Additionally, this tool is also used every year in strategic planning process to make prognosis for financial needs for certain functions/processes. The information from this tool is also used when there is a need for statistics (for example, upon request of other institutions) regarding time spent on particular functions, e.g., inspections, consultations.</p> <p>A methodology for long-term evaluation of human resources needs in 2017 was a function matrix. As a result of using it, a plan for further actions was established.</p>

					<p>It includes measures, such as, changing number of positions, additional evaluations after certain events, etc. The plan is currently being carried out.</p> <p>Answering the specific question –the conclusions resulting from use of the aforementioned tools may lead to/be basis for decisions for increasing or decreasing the number of employees or decisions to outsource.</p>
74	Latvia	Article 15	Page 73	<p>In regards to environmental monitoring it is said that continuous radiation monitoring is carried out on the Ignalina NPP site and within a radius of 30 km. Is more detailed information on the radiation monitoring program and its results publicly available?</p>	<p>Two levels of monitoring are performed in the surrounding of INPP, INPP has its own monitoring program and Environmental Protection Agency (EPA) is performing National radiological monitoring of the environment (implemented as a part of National Environmental Monitoring Programme, that is approved by the Government Resolution (https://www.e-tar.lt/portal/lt/legalAct/d6fdb4b0c89a11e8bf37fd1541d65f38)).</p> <p>EPA has 5 automated air radiation monitoring stations located in surroundings of INPP (in Turmantas, Rimšė, Mačionys, Visaginas and Raipolė). The measurements in the stations are carried out every 10 minutes, and the results are published at http://radis.gamta.lt/.</p> <p>Surface water, bottom sediments and aquatic biota samples are taken from the Drūkšiai lake (the lake used for cooling) 4 times a year. On routine basis analysis of activity concentration is performed in laboratory: Cs-137, Sr-90 and Co-60 in water samples, Cs-137, Sr-90, K-40 and Co-60 in bottom sediments and aquatic biota.</p> <p>Non-automated air aerosol sampling station is located in Utena, about 70 km from INPP. Activity concentrations of Be-7, Cs-137, Cs-134, and I-131 in air filters are measured in laboratory of EPA.</p> <p>Annual results of measurements are placed on the website of EPA (http://gamta.lt/cms/index?rubricId=7a9a8309-05de-4580-836c-cfff1327d18b) together with data from other localities.</p> <p>Ignalina NPP Radiological Environmental Monitoring Programme is developed on the basis of the requirements laid down in Appendix 5 of “Requirements for Environmental Radiological Monitoring by Nuclear Installations” of the Regulations of Environmental Monitoring by Economic Entities and the Procedure for Radiological Monitoring of Foodstuffs, their Raw Materials and Potable Water. Based on the reporting procedure indicated in these regulatory requirements the INPP notifies the appropriate structural subdivisions of the Ministry of Environment on the radiological monitoring results of the INPP</p>

					region. The summary information on this subject matter is provided in the INPP website https://www.iae.lt/aplinkosauga/35 .
75	Latvia	Article 16	Page 80 and Page 82	<p>The report provides information on classification of emergencies at Ignalina NPP (Page 80) and severe accident management (Page 82). Considering the close proximity of the Ignalina NPP and spent nuclear fuel storage from the Latvian border, could you provide information on the possible consequences of a nuclear accident and radiation accident on the territory of Latvia and what could be the protection actions in the emergency preparedness zones?</p>	<p>Results of analysis of radiological consequences of Design Basis Accidents and Beyond Design Basis Accidents (BDBA) are provided in the Safety Analysis Reports of corresponding's nuclear installations and facilities situated at INPP site. Results of these analysis shows that the radiological impact to the representative of the public group can be considered as insignificant. Moreover, analysis of the postulated accidents that might have an off-site radiological impact, including those of very low probability of occurrence (e.g. beyond design basis earthquake and large commercial aircraft crash accompanied with large-scale fire) is performed. The analysis is based on IAEA General Safety Requirements GSR Part 7, Requirement 4 and related to hazard assessment of nuclear installations and facilities for establishing arrangements for preparedness and response for a nuclear or radiological emergency and required by Law. Nuclear installations and facilities such as Spent Nuclear Fuel (SNF) storage pools, reactors (graphite of the reactor core), interim SNF storage facilities, solid radioactive waste treatment and storage facilities, and bitumen solidified radioactive waste storage facility were analysed. The results of this analysis show that even in case of accidents of very low probability of occurrence, the annual effective dose at borders of neighbouring countries is far below limit for annual effective dose of 1mSv. For instance, in case of large commercial aircraft crash accompanied with large-scale fire at SNF storage pools of INPP, the annual effective dose at Lithuanian-Latvian border is conservatively estimated as 0,12 mSv. Other cases demonstrated even lower doses.</p>
76	Latvia	Article 16	Page 83	<p>In regards to the start of operations at the Belarusian NPP, it is said that exercises were conducted on both national and municipal level. Could you elaborate on the nature of these exercises, their results and lessons learned?</p>	<p>National level exercise was conducted from 1st to 4th of October in 2019. Its main objective was to improve and put into practice the skills of entities of civil protection system in performing the functions defined in the National Plan for Protection of Population in Case of Nuclear or Radiological Accident. A number of important functions, i.e. organizing activities and protecting population, which should be performed in case of radiological or nuclear accident, were tested.</p>

				<p>Exercise scenario was based on possible emergency at Belarusian NPP where general emergency class was declared.</p> <p>22 institutions and 6 municipalities took part in exercise, invoking more than 300 entities of civil protection system. Exercise scenario also covered real actions on urgent protective actions including evacuation, relocation, imitation of iodine thyroid blocking and exposure control. Performance of siren warning system was tested followed by provision of recommendations and information via National television and radio, and cell broadcast messaging service. During exercise aerial monitoring and on ground collection of samples were performed.</p> <p>Participants and evaluators assessed the organizational activities of the exercise and noted that the exercise was well-organized.</p> <p>After summing exercise results and weaknesses identified, there are some recommendations in order to improve the current situation:</p> <ol style="list-style-type: none"> 1. Siren warning system consists of more than 800 sirens whose average age is above 40 years old. Such sirens warn approx. 53 % of residents. A great number of sirens is operated manually (siren is turned on upon arrival), so its activation time may exceed a few hours in case of an emergency. Therefore, siren warning system requires modernization as well as there is a need to improve the infrastructure by warning residents via cell broadcast messaging. This improvement may cost no less than EUR 6 million. 2. Lithuanian residents are also informed on nuclear and/or radiological accident on the website www.lt72.lt. However, such information is not sufficient enough, so there is a need to improve the website www.lt72.lt in order to ensure its appropriate operation in case of increase in the number of visitors. This improvement may cost approx. EUR 50 thousand per year. 3. Information exchange and decisions shall be transmitted and communicated to all institutions, which take part in the emergency management and are also included in the Annexes of the National Plan for Protection of Population in Case of Nuclear or Radiological Accident. Therefore, in order to ensure and maintain the activities of Emergency Operations Centres there is a need to improve its functionality by creating a specific information platform. Creation of information system may cost EUR 1.5 million, while its maintenance may cost EUR 250 thousand per year. 4. The exercise has been organized while considering worst case scenario at the Belarusian Nuclear Power Plant, yet it is not applied to human, material and
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					<p>financial resources planning of state institutions and municipalities and preparation of emergency management plan. Essential functions which shall be reconsidered in regard with the scenario agreed and inter-institutional cooperation are the following: public warning and information; residents' preparedness to hide and stay inside (at home) for 72 hours until the assistance will be provided; providing state and municipal assistance to residents (for example, provision with energy, communications, food, water etc.); iodine prophylaxis; evacuation of residents; exposure control and decontamination; ground-based and air-borne monitoring; temporary relocation of residents. However, funding for these functions during the exercise on state and municipal levels is not sufficient. According to the estimations, exercise planning and implementation may need no less than EUR 350 thousand per year.</p> <p>5. There is a lack of financial resources for appropriate material provision of forces of civil protection system (fire and rescue forces, the forces of the police, the forces providing health care services/ambulance etc.) and municipalities. Key weaknesses identified: insufficient number of personal protective equipment (coveralls, gas-masks, respirators, potassium iodide, TLD dosimeters and electronic/digital dosimeters), municipalities are in need for prepared personnel and equipment for evacuation and decontamination, there are not foreseen adequate urban infrastructure facilities/objects for the function of decontamination, issues regarding provision of collective protection structures shall also be taken into consideration in order to ensure the minimum living conditions of the evacuated or displaced population. Funding required for the aforementioned functions shall be assessed in detail.</p>
77	Norway	Article 15	Page 67, Figure 15.1	<p>Could you explain an increase of collective doses of INPP and contractors' personnel in 2017? What trend (increase or decrease) of doses could be expected for INPP decommissioning activities?</p>	<p>Increase of the collective dose of the INPP personnel in 2017 is related to more frequent repair works at the hot cell than it was performed earlier. In any case the annual dose reached 79 % of the planned dose for year 2017. It is expected that the collective dose will increase in the future decommissioning activities, because of the decommissioning of the more contaminated structures, systems and components of the nuclear facility and demolition of the more contaminated equipment.</p>

78	Norway	Article 6	Page 10, Existing Nuclear Installations	<p>Report states: "The Ignalina nuclear power plant (INPP) is the only existing nuclear installation...". "Reactors of Unit 1 and Unit 2 are defueled...". In accordance with Nuclear Installation definition in Article 2 of the Convention "... a plant ceases to be a nuclear installation when all nuclear fuel elements have been removed permanently from the reactor core...".</p> <p>Could you clarify status of nuclear installations in Lithuania?</p>	<p>Pursuant Article 2 of the Convention "... a plant ceases to be a nuclear installation when all nuclear fuel elements have been removed permanently from the reactor core <u>and have been stored safely in accordance with approved procedures, and a decommissioning programme has been agreed to by the regulatory body</u>".</p> <p>Currently both INPP Units have the status of the permanently shut down units. Based on Paragraph 3 of Article 29 of the Law on Nuclear Safety the Licences for operation of the NPP Units are valid as long as nuclear fuel remains in the Units. According to national legal framework and regulatory system, INPP is going to be decommissioned in accordance with the Final Decommissioning Plan (FDP), which substitutes the <i>decommissioning programme</i>. The FDP of INPP was approved by the Ministry of Economy in 2005. The FDP is revised and updated every 5 years and updated version of FDP is agreed by regulatory body (VATESI) and approved by the Ministry of Energy.</p> <p>Although reactors of Unit 1 and Unit 2 are defueled and FDP approved, the nuclear fuel is still in the spent fuel storage pools located in the reactor buildings of the Units. Since the intermediate storage of the nuclear fuel, in accordance with approved procedures and safety justification documentation, is foreseen in the dry type interim spent nuclear fuel storage facilities, it was decided before defueling of reactor units to consider and correspondently report on the INPP as on nuclear installation under CNS.</p>
79	Norway	Article 6	Page 10, Overview of significant safety related issues, including events that	<p>Report states that nine events happened in nuclear installation in Lithuania during the period of 2016-2018. Could you provide more detailed information of events, indicating nature of events and measures taken in response to these events.</p>	<p>During the period of 2016-2019 no serious safety violations (violations that may cause danger to employees, residents, their property and / or the environment due to the harmful effects of ionizing radiation) were found. The violations mainly were related to these areas:</p> <ol style="list-style-type: none"> 1. improper sorting of radioactive waste; 2. improper marking of dual-use nuclear goods ; 3. improper marking of packages of radioactive waste; 4. improper operation of cranes; 5. incompleteness of safety related documentation and records; 6. removal of weak soil from the construction site of radioactive waste disposal facility; 7. deficiencies in instructions for overhead lifting equipment used for spent fuel management and radioactive waste management activities.

					<p>To eliminate the detected violations the remedial actions were taken by legal entities, for example:</p> <ol style="list-style-type: none"> 1. correction of documentation and records; 2. correction of markings; 3. elimination of lack of equipment; 4. additional research of soils in construction site and removal of unfit soil. <p>All violations were eliminated within timeframe set by VATESI by implementing improvement measures approved by VATESI.</p>
80	Norway	Article 7	Basic features of inspection programmes Page 23, Figure 7.1	Could you explain the reason for the increased number of inspections in 2018 compared to the two previous years?	The number of inspections was increased due to the increase in the number of supervised entities that requested licenses to undertake the activities in the ionizing radiation environment of the nuclear facilities and the number of entities in possession of small quantities of nuclear materials.
81	Norway	Article 8	Management system of regulatory body, Page 29	Please note, that IAEA's safety requirements GS-R-3 has been superseded by GSR Part 2.	<p>Information in the report was not properly updated. VATESI integrated management system (IMS) is established, implemented and continually improved based on the latest IAEA and ISO management system standards. So VATESI IMS was also revised in line with the IAEA GSR Part 2 general safety requirements Leadership and Management for Safety and ISO 9001:2015 Quality Management System Requirements.</p> <p>Specific GSR Part 2 requirements applicable for the documented process are indicated in each VATESI IMS procedure.</p>

82	Russian Federation	Article 16	page 86	<p>In accordance with the report, "there is a need for an agreement between Belarus' and Lithuania's competent authorities for early notification in accordance with Convention on Early Notification of a Nuclear Accident. The draft bilateral agreement is currently being negotiated." What is the current status of the project agreement and what obstacles exist for its conclusion?</p>	<p>On 29 August, 2019, VATESI has last time (negotiations were started in 2014) sent a draft agreement to the Belarusian Ministry of Emergency Situation (MES) with a proposal to sign this agreement before the first transportation of nuclear fuel to the Belarusian territory. On February 13, 2020, MES has confirmed their "readiness to start official internal state procedures concerning this document". VATESI still hopes that agreement would be signed before transportation of nuclear fuel to the Belarusian territory.</p>
83	Russian Federation	Article 8	Article 8	<p>Article 8 notes that the Lithuanian regulator VATESI cooperates with many third-party technical support organizations both in Lithuania and abroad. What services of the specific organizations does VATESI uses and how is the conflict of interests avoided and observed contractor impartiality principle? May these contractors carry out works for the Lithuanian NPP operator as well?</p>	<p>The Article 43. Purpose of Scientific Technical Support of Nuclear Safety of the Law on Nuclear Safety defines that: "The purpose of the nuclear safety scientific and technical support system is to assist the State Nuclear Power Safety Inspectorate (VATESI) in performing the regulatory and supervisory functions assigned to it and to ensure and improve the nuclear safety of license holders. This support may take the form of consultancy, design, construction, research, expert or other work which requires a high level of scientific and technical qualification, competence, special knowledge and skills."</p> <p>The Article 45. Work Principles of the System of Scientific Technical Support of Nuclear Safety of the Law on Nuclear Safety defines that: "<u>In selecting specific contractors, the principle of impartiality of the contractors shall be applied. The scientific technical support organisations (the STSO) or experts and consultants which have already participated in preparing the documents on a nuclear installation design or the documents required for the evaluation of nuclear safety that were submitted when obtaining a licence or participated in the preparation of such documents under request of the licence holder, shall not participate in performing the review and evaluation of the same documents. The STSO and the experts and consultants shall declare compliance with this requirement and their impartiality in the course of their selection carried out in the manner set out by the legal acts.</u>"</p> <p>The implementation of these provisions of the Law on Nuclear Safety is assured through the conditions of procurement of these services, where the Suppliers must provide a declaration of impartiality.</p>

					Hence, STSO can provide scientific-technical support to both VATESI and Ignalina NPP and this support is provided on a contractual basis. However, above all, the principle of impartiality defined in the Law on Nuclear Safety shall be guaranteed.
84	Russian Federation	General	General	Did you do the probabilistic safety analysis (PSA) for different places of storage of spent nuclear fuel and radioactive substances (ISFSF, SNFSF-1 and SNFSF-2)? If yes, what was its scope and what were the results of the analysis done? Were the potential external natural impacts considered?	<p>Probabilistic and deterministic approaches were applied for initiating events, including potential external natural impacts, selection and evaluation and their results are provided in the corresponding safety analysis reports of ISFSF. Besides, the results of external natural impacts are provided in the Lithuanian National final report on stress tests.</p> <p>The likelihood of accidents which may cause serious radiological consequences in the ISFSFs is very low in comparison with such accidents in the NPPs. IAEA provides recommendations how to conduct PSA (level 1 and level 2) only for NPPs. Due to these reasons and according to our legislation, comprehensive PSA is mandatory only for NPPs.</p> <p>This question is related with Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention). Thus, we believe that further discussion, if needed, shall be continued in the framework of Joint Convention.</p>
85	Russian Federation	General	Summary	<p>The section Summary, Challenge 4, the Lithuanian party gives a number of declarative statements such as:</p> <ul style="list-style-type: none"> - Uncovering “a significant number of recommendations regarding the NPP project, its safety justification and accident management procedures” by results of stress test at Belarus NPP; - Uncovering “substantial deficiencies of the project which do not allow to commission this NPP” by results of international missions at Belarus NPP; 	All Lithuanian questions related Belarusian NPP safety are based on IAEA safety standards and international practice. All these questions with appropriate arguments are submitted to Belarus (some of them you could find in CNS internal website).

				<p>- Insufficiency of justification of the site selection for construction of Belarus NPP, a number of problems and deficiencies in the site selection.</p> <p>We ask the Lithuanian party to support these statements with concrete facts demonstrating problems of the project and Belarus NPP site.</p>	
86	Russian Federation	General	Summary	<p>The National Report of Lithuania lacks of any information about the Lithuania nuclear program. Does Lithuania plan to develop nuclear power and build any new power units in future?</p>	<p>It should be considered that this Lithuanian National Report is the eighth in the series and provides updated information as compared to the Lithuanian National Report issued in 2016. More detailed information on Lithuanian nuclear program is available in Lithuanian National Report issued in 2016. All reports on CNS are available on the State Nuclear Power Safety Inspectorate (VATESI) website: www.vatesi.lt.</p> <p>The project of new NPP (Visaginas NPP) is cancelled and the National Energy Independence Strategy does not foresee development of nuclear power in Lithuania. The National Energy Strategy is focused on the renewable sources of energy and energy efficiency. Due to these reasons, continuation of the new NPP project is not foreseen.</p>
87	Slovakia	Article 7	page 24	<p>In relation to legal actions and enforcement measures the VATESI issued mandatory requirements to eliminate detected violations of the nuclear safety requirements and rules (to take remedial actions) in the period of 2016 – 2019.</p> <p>Could you please specify to what kind of remedial actions is it referred to?</p>	<p>It should be mentioned that during the period of 2016-2019 no serious safety violations (violations that may cause danger to employees, residents, their property and / or the environment due to the harmful effects of ionizing radiation) were found. The violations mainly were related to these areas:</p> <ol style="list-style-type: none"> 1. improper sorting of radioactive waste; 2. improper marking of dual-use nuclear goods ; 3. improper marking of packages of radioactive waste; 4. improper operation of cranes; 5. incompleteness of safety related documentation and records; 6. removal of weak soil from the construction site of radioactive waste disposal facility;

					<p>7. deficiencies in instructions for overhead lifting equipment used for spent fuel management and radioactive waste management activities.</p> <p>To eliminate the detected violations the remedial actions were taken by legal entities, for example:</p> <ol style="list-style-type: none"> 1. correction of documentation and records; 2. correction of markings; 3. elimination of lack of equipment; 4. additional research of soils in construction site and removal of unfit soil. <p>All violations were eliminated within timeframe set by VATESI by implementing improvement measures approved by VATESI.</p>
88	Ukraine	Article 14.2	Page 62	<p>The para. “Elements of ageing management programme(s)” in Article 14 (2) describes the updated Ageing Management Program. What requirements are established for ageing management of spent fuel storage containers in SNFSF-1 and SNFSF-2?</p>	<p>The design requirements are set for control of the safety barriers status during handling and storage period of the spent nuclear fuel storage casks. Such requirements are transferred to the instructions for handling of storage containers at SNFSF-1 and SNFSF-2 (leaktightness control of CASTOR RBMK casks, status control of welding seams of CONSTOR-RBMK1500 casks). Moreover, according to Instruction for Screening of Structures, Systems and Components of the INPP Nuclear Facilities subject to Aging Management, spent nuclear fuel storage casks were included on the List of Systems and Components of the INPP Facilities whose aging must be managed.</p> <p>Ageing management is ensured by maintaining casks storage parameters at SNFSF-1 and SNFSF-2, provision of the periodic control of cask safety barriers and their status assessment (possible degradation).</p>
89	Ukraine	Article 15	Page 74	<p>Has the NPP radiation monitoring system been upgraded to take into account the peculiarities of the decommissioning stage and long-term operation of its equipment?</p>	<p>The NPP radiation monitoring system is being continuously upgraded due to commissioning of new nuclear facilities at the INPP site and conducted INPP equipment dismantling and decontamination projects.</p>

90	Ukraine	Article 16.1	Page 78	<p>Both aquatic and atmospheric spreading modelling is very important task for identifying protection action zones, to determine zones of enhanced radiation monitoring and interpret assessment results to prevent any inappropriate actions from the public side (e.g. unjustified thyroid blocking, unnecessary restrictions on imports, etc.). Is VATESI able to provide the transboundary impact prognosis for Lithuania territory and public (including inverse tasks and source term restoration) in case of an unknown release source (unknown location, intensity and chronology) but known measurement results presented by neighbor countries (e.g. Ruthenium-106 event in 2017)? Has VATESI established action plans/strategies/arrangements for cases with lack of source term data? Is VATESI going to develop and provide the EPR exercise on response to such events?</p>	<p>For prognosis of radionuclides spreading into environment, Environmental Protection Agency uses decision support tool (ARGOS) taking into account on-line data of national monitoring network. VATESI is a national contact point and competent authority responsible for communication with IAEA, EC and neighbouring's countries according to Convention on early notification of a nuclear accident and bilateral agreements in case of nuclear or radiological accidents. According to the State Residents Protection Plan in Case of a Nuclear or Radiological Accident (the National Plan) and internal VATESI procedures, if information about unknown release source would be received from competent abroad authorities, VATESI is responsible for providing of this information to the state institutions concerned (Environmental Protection Agency and Radiation Protection Centre and others) that are responsible for prognosis of radionuclides spreading into environment and evaluation of exposure of people and environment. In such cases, response actions and other measures are established in the National Plan. For instance, the National Plan is activating when 3 neighbouring automated gamma dose rate stations of national monitoring network record 300 mSv/h and higher dose rate (more about national monitoring network see National Report on CNS, Article 16(1), <i>Regulatory review and control activities</i>, p. 85). Currently, VATESI have no plans to conduct EPR exercise on response of such events. About VATESI's trainings and exercises programmes see National Report on CNS, Article 16(1), <i>Training and exercises, evaluation activities and main results of performed exercises and lessons learned</i>, p. 83.</p>
91	Ukraine	Article 16.1	Page 78	<p>Do experts of the VATESI emergency center use radiation monitoring (measurement) results to adjust the radionuclide transport model in the event of a radiological accident in real time? If such results are used, what information channels are involved to transmit measurement results to the decision support system?</p>	<p>VATESI is not responsible for prognosis of radionuclides spreading into environment. According to the State Residents Protection Plan in Case of a Nuclear or Radiological Accident, VATESI provides the information about evaluation of source terms and release characteristics to the state institutions concerned (Environmental Protection Agency and Radiation Protection Centre) that are responsible for prognosis of radionuclides spreading into environment and evaluation of exposure of people and environment (see also answers to questions No. 63, 90 (QID261156 and QID23865)). For prognosis of radionuclides spreading into environment, Environmental Protection Agency uses decision support tool (ARGOS) taking into account on-line data of national monitoring</p>

					network (more about national monitoring network see National Report on CNS, Article 16(1), <i>Regulatory review and control activities</i> , p. 85).
92	Ukraine	Article 19.8	Page 114	Article 19 (8) states that VATESI approved a project for storage of severely damaged spent fuel (under project B1 SNFSF-2). How is the defence-in-depth principle implemented in storage of damaged nuclear fuel?	<p>The requirement for defence in depth for dry spent fuel storage installation is set in the Nuclear Safety Requirements BSR-3.1.1-2016 “General Requirements for Dry Type Storage for Spent Nuclear Fuel“ cl. 10. “Safety of the storage facility shall be assured by systematic application of the defence-in-depth principle, which is grounded by a system of radionuclide barriers preventing against spreading of radioactive materials within a storage facility and to the environment and by a system of engineering and administrative measures protecting the barriers and assuring their suitability during the storage facility operation”.</p> <p>In implementing the above requirement the ISFSF-2 safety is ensured by consistent realisation of the principle of defence-in-depth based on the barrier system preventing or hindering migration of radionuclides or other substances from the ISFSF and their spreading to the environment and by using a system of technical and organizational measures protecting those barriers and maintaining their efficiency during the operation and directly protecting employees and the public against harmful impact of ionising radiation.</p> <ul style="list-style-type: none"> • The CONSTOR® RBMK1500/M2 cask uses a double walled steel containment of the cask with a forged massive single walled head ring, heavy concrete as additional shielding. The cask is equipped with a triple closure system consisting of primary lid, seal plate and secondary lid. The primary lid is bolted and sealed by means of an elastomer gasket. It provides shielding and bearing of internal and external mechanical loads exerted to the lid system as well as temporary containment prior to welding of the seal plate. • Seal plate and secondary lid are welded to the cask body and form the two leak-tight containment barriers. • Fuel bundles with mechanical damages and fuel bundles of the experimental FA are additionally canned in cartridges (CAN 160, Can 500 and CAN1200). • The release of fuel debris from the damaged fuel into the cask is restricted by the usage of the mechanical filter discs at the top and at the bottom of the

					<p>cartridges. The mesh size of this filter disc is 100 µm. Therefore, all bigger particles from the damaged fuel are kept inside the cartridge.</p> <ul style="list-style-type: none"> • If comparing casks loaded with normal and damaged fuel, the drying process for damaged fuel is longer. <p>When drying process for damaged fuel is completed drying agent cartridge is inserted into the cask cavity to capture the residual water possibly retained in damage fuel and released during the storage period.</p>
93	Ukraine	Article 19.8	Page 115	What was the reason for deciding to refuse radwaste bituminization at the Ignalina NPP?	<p>The decision was taken to change evaporator concentrates solidification method from bitumen solidification at the bitumen solidification facility to cement solidification together with the perlite and spent ion-exchange resins using the approved recipe at the cement solidification facility due to reduced overall volume of currently generated liquid radioactive waste at the INPP (non-chemical decontamination of the MCC, early defueling ahead of the schedule, 5-times reduced number of planned decontamination of ion-exchange resins on condensate purification, reduced volume of produced evaporator concentrate, etc.), also on the basis of carried out substantiation of possibility of cement solidification of evaporator concentrates and a number of technical, explanatory and substantiating documents containing financial substantiation, technical data, research results, analyses of methods of processing of evaporator concentrates during the period 1984-2018 and up to year 2033.</p>
94	Ukraine	Article 7.2.1	Page 14	The National Report states "New requirements on temporary storage of very low level radioactive waste in order for the radionuclides to decay to clearance levels and requirements for characterization of radioactive waste were added". Is all very low-level radioactive waste stored for decay of radionuclides to the clearance levels?	<p>Common practice of Lithuania for management of short lived very low level radioactive waste is disposal in near surface facility. In accordance with statements of Regulatory requirements on predisposal management of radioactive waste, BSR-3.1.2, decay method might be used only for those radionuclides that half-life period is less then half-live of ¹³⁷Cs and storage shall be organized in accordance with established conditions (ensurance of containment, control of containment, monitoring of waste). In practice, properties of such a waste would be following: activities of radionuclides are near clearance level and decay time would end before finishing of decommissioning of Ignalina NPP. After decay period clearance measurements shall be performed.</p>

95	United States of America	Article 14	page 61	<p>A nuclear power plant that is being dismantled may be a good opportunity to gather information that help inform our knowledge of aging management. Are there any plans to perform materials testing or other testing on the components of Ignalina as it is dismantled?</p>	<p>The goal of aging management is to timely detect and mitigate aging impact on structures, systems and components (SSC) important to safety of the Ignalina NPP nuclear facilities in order to ensure their reliable functional performance, safety assurance and economic efficiency during the entire life cycle, including during extended designated design service life of SSC. Therefore, during the equipment dismantling process it is not planned to perform any analysis of changes of physical characteristics of metals and materials that have occurred over the period of the Ignalina NPP operation for aging management purposes. Such analyses are conducted for equipment dismantling purposes during development of dismantling design documents. Analysis of changes of physical characteristics of metals and materials that have occurred over the period of the Ignalina NPP operation assumes use of results obtained from companies acting in related sectors. Since the strategic plans for development of the energy sector in Lithuania does not envisage construction of a new NPP and the process of analysis/testing/survey requires application of considerable amount of labour and financial resources, therefore, the Ignalina NPP does not plan to conduct any of such testing and analyses.</p>
96	United States of America	Article 14	page 63	<p>The report lists several safety-related areas that are inspected annually. Are there any other areas that are inspected periodically, but less often than once a year? For example, are any areas inspected every two or three years?</p>	<p>Yes. VATESI's safety-related areas are inspected during regular or special inspections. Regular inspections are planned according to the periodicity that is established in VATESI internal inspection program for 5 following years. The periodicity depends on the extent and complexity of works carried out in the nuclear energy area, impact of them on the nuclear facility safety, the type and complexity of the nuclear facility, the type of activities performed by economic entity, results of previous inspections, essential events that had impact to safety and etc. Accordingly there are areas that are inspected annually and areas that are inspected less often than once per year.</p> <p>For example the periodicity of</p> <ol style="list-style-type: none"> 1. ageing management of safety-related systems, constructions and components is once per three years; 2. emergency preparedness features is once per two years; 3. physical security system's features of nuclear facility varies from once per year to once per five years depending on type of nuclear facility or the category of nuclear facility installations' ; 4. and other areas.

					<p>The periodicity of inspections of economic entities engaged in the nuclear energy activities with sources of ionising radiation which are subject to obtaining a license or a temporary permit of the type specified in:</p> <ol style="list-style-type: none"> 1. Subparagraphs 1-3 of Paragraph 3 of Article 12 of the Law on Radiation protection is once per two years; 2. Subparagraph 4 of Paragraph 3 of Article 12 of the Law on Radiation protection is once per three years.
97	Hungary	Article 6	Page 10	<p>According to the National Report, the INPP (Ignalina Nuclear Power Plant) reported 9 events to VATESI (regulatory body) during the period of 2016–2018. What were these events and the measures taken in response? Please provide a list of these briefly describing both the events and the measures taken. / Sharing these experiences would be highly appreciated as they could be taken into account when preparing for the future decommissioning of Hungarian nuclear facilities.</p>	<p>During the period of 2016÷2018 9 events were reported to VATESI (see list below). No serious safety violations i.e. violations that may cause danger to employees, residents, their property and / or the environment due to the harmful effects of ionizing radiation were found.</p> <ol style="list-style-type: none"> 1. Automatic actuation of the section of Water Fire Fighting system as a result of hot works performance. Date of event: 2016-10-17. Event nature: deficiency of Operational procedure. Measures: the procedure describing issue of a permit for hot works was updated; 2. The protective ring of the cask stuck during spent fuel loading operation. Date of event: 2016-10-17. Event nature: deficiency of operational personnel proper behaviour, lack of strong safety culture, deficiency on work supervision by the supervising managers. Measures: additional instructing was performed for personnel on evaluation and reducing of risk at work, on applying strong safety culture attributes, on complying to the requirements of work procedures and project documentation; 3. Flame from the diesel generator stack during its test after maintenance. Date of event: 2016-10-18. Event nature: deficiency of maintenance procedure. Measures: additional criteria were prepared, and maintenance procedure was updated to check accumulation combustion products sediments and to clean it from DG systems; 4. Smoke in compartments of SSC's as a result of overheated transformer. Date of event 2017-04-23. Event nature: deficiency of electrical equipment. There were no Manufacturer recommendations to check voltage quality. Measures: the

				<p>program of equipment verification (checking and testing) was supplemented by checking of the quality of transformer voltage.</p> <p>5. Unusual situation during spent fuel rod transfer operation from transportation basket into the ring basket of the cask. Date of event 2017-08-11. Event nature: deficiency of operational procedure. The procedure did not allow manual adjusting of the position of the fuel loading machine when it works in a automatic mode. Measures: the procedure was updated. Also, full scale template of ring basket and transportation basket of the cask were prepared to control position of the fuel loading machine;</p> <p>6. Short-term voltage cut off on sections 2BX, 2BY, 2BZ as a result of human error during trials of reserve transformers signalization. Date of event 2017-09-11 Event nature: maintenance personnel behaviour deficiency. Measures: additional instructing of the personnel was performed on evaluation and reducing of risk at work, on applying strong safety culture attributes;</p> <p>7. Spent fuel rod cartridge dropped to the bottom of the spent fuel pool due to not properly closed its lid. Date of event 2017-10-14. Event nature – deficiency of operational procedure. Measures: the operational procedure was amended with criteria and behaviour to check the properly locked position of fuel rod cartridge;</p> <p>8. Unhooking of the crane hook and clamp during the fuel rod lifting operation in the hot cell because of the procedure deficiency. Date of event 2018-04-01. Event nature – deficiency of operational procedure. Procedure did not contain clear criteria to check the crane hook and clamp position during the fuel rod lifting operation in the hot cell and responsibilities for it. Measures: the operational procedure was updated;</p> <p>9. Personnel`s erroneous actions during electric switching. Date of event 2018-05-28. Event nature: operational personnel behaviour`s deficiency. The operational personnel violated the requirements of the working procedure. During the work performance the operational personnel failed to properly identify the transformer which was to be the subject for intervention. Inadequate supervision of the operational personnel: the supervision did not ensure fulfilment of the</p>
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					instruction requirements. Measures: additional verification of the operational personnel knowledge. Additional instructing was performed for personnel on applying strong safety culture attributes, on complying to the requirements of working procedures.
98	Hungary	Article 6	Page 10	According to the National Report, the Decommissioning Plan is subject to an interinstitutional consultation, and also it is to be approved. Are the Decommissioning Plan and its revisions submitted for review and/or approval to the regulatory body?	<p>Yes. The Final Decommissioning Plan (FDP) was approved by the Ministry of Economy in 2005 and agreed by regulatory body (VATESI).</p> <p>According to current legislation the FDP shall be revised and updated every 5 years and updated version of FDP shall be agreed by VATESI and approved by the Ministry of Energy.</p>
99	Hungary	Article 7	Pages 19 and 20	Page 57 of the National Report lists the licenses and permits which are required during the lifetime of a nuclear facility. This list does not include either the licensing of certain modifications, the licensing of changing the licensee (the holder of the license), or the licensing of the release of the nuclear facility from regulatory control. Are these three areas also subject to licensing, or are they supervised in a different way?	<p>There are also other types of authorization elements, that are not listed in the page 57 of the National Report. More detailed information about the authorization system is provided in the chapter “System of licensing” of the National Report (page 19).</p> <p>Within the existing license (for instance, operation license) the license holder shall agree with VATESI different type of modification documentation during the lifetime of nuclear facility in accordance with nuclear safety requirements BSR-1.8.2-2015 “Categories of Modifications of Nuclear Facility and Procedure of Performing the Modifications”.</p> <p>Authorization process in the case of the changing of licensee essentially belongs to the legal aspects of this change. If all legal rights and responsibilities are planned to be taken over by the new licensee, Business continuity plan shall be presented and the relevant licence application documents shall be updated (Paragraph 34.4 of The Regulations on the Issue of Licenses and Permits Necessary to Engage in Nuclear Energy Activities). In other case – new license shall be received.</p> <p>Authorization for the release of the nuclear facility from regulatory control is based on the authorizations within the final stage of the decommissioning process. The Nuclear facility is released from the regulatory control after revocation of the</p>

					decommissioning license based on the agreement on the Decommissioning report and Radiological characterization report.
100	Hungary	Article 14	Page 56	<p>According to the National Report, the licensee and the regulatory body are conducting Periodic Safety Reviews (PSRs) of the INPP's units during their decommissioning (Pages 9 and 94). The wording on Page 56 also suggests that according to the Law on Nuclear Safety - after the issuance of the permit for commercial operation - the PSRs are to be conducted in all phases of the lifecycle of the nuclear facilities. (So basically PSRs are not limited to the operational phase). In terms of thoroughness, are the PSRs conducted during decommissioning differently from the PSRs that would be needed to be conducted during operation?</p> <p>Is there a different set of regulations and/or different regulatory guidance for PSRs during decommissioning and PSRs during operation, or the same regulations and guidance can be applied to both lifecycle phases?</p> <p>What are the experiences so far regarding the appropriateness and usefulness of conducting PSRs during decommissioning? Are there any findings that were identified during the PSR, but not during a different, less extensive review process (e.g. review</p>	<p>The Law on Nuclear Safety requires periodic safety review in case of operation of nuclear installation. Since the INPP is still maintained under the operational licences (transition from operation to decommissioning) during the fuel removal from the Units in compliance with the regulatory requirements, the periodic safety analysis of Unit 1 was completed at the beginning of 2017. The periodic safety analysis and justification of Unit 2 must be performed by the end of 2020.</p> <p>The content and the scope of the periodical safety review of the INNP Unit 1 was chosen in accordance with the law on Nuclear Safety and regulatory requirements and agreed with the VATESI. It covered the areas recommended by the IAEA Specific Safety Guide No. SSG-25 "Periodic Safety Review for Nuclear Power Plants". The performed Periodic safety analysis of the period 2007–2016 demonstrated that the remaining in operation systems of INPP Unit 1 ensure in a reliable manner the safe operation conditions and limits set in the Technical Specifications for Operation and the safety functions performed by the safety systems are fully preserved and performed by the systems remaining in operation and meet the design requirements during the spent fuel pools defueling stage.</p>

				<p>of the Decommissioning plan, the management system, the cost estimate, the procedures, etc.)? /</p> <p>Lithuania's practice of conducting Periodic Safety Reviews (PSRs) not only during the operation of a nuclear facility, but during its decommissioning as well could be considered a GOOD PRACTICE, if the appropriateness and usefulness of these PSRs are verified (please see the questions).</p>	
101	Hungary	Article 16	Page 88	<p>Challenge 4 for Lithuania from the 7th Review Meeting was to "take appropriate steps including conclusion of agreement with Belarus to ensure that competent authorities of the states in the vicinity of Lithuanian Nuclear Installation are provided with appropriate additional information as requested in Article 16(2) of the Convention on Nuclear Safety". According to the National Report, Lithuania has agreements in this field with Denmark, Norway, Poland, Latvia and Sweden (Page 88), and the draft of the agreement with Belarus is currently under negotiation (Page 8). Are there any steps taken or plans to arrange agreements with further countries - e.g. Russia - for the information of the competent authorities?</p>	<p>Lithuania has agreements or is going in the near future to sign agreement with the countries listed in the Report. Talking about long-term perspective, the demand to sign agreement with other countries will depend mainly on nuclear power developments in these countries.</p>