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THE HEAD OF THE STATE NUCLEAR POWER SAFETY INSPECTORATE

ORDER NO 22.3-160

**ON THE APPROVAL OF NUCLEAR SAFETY REQUIREMENTS BSR-1.4.3-2017
“HUMAN RESOURCES OF ORGANISATIONS IMPLEMENTING LICENSED
ACTIVITIES IN THE AREA OF NUCLEAR ENERGY”**

20 September 2017
Vilnius

Pursuant to subparagraph 3 of paragraph 1 of Article 22, paragraph 2 of Article 50¹ of the Republic of Lithuania Law on Nuclear Energy, paragraph 1 of Article 11, paragraph 1 of Article 23 and paragraph 2 of Article 28 of the Republic of Lithuania Law on Nuclear Safety:

1. I hereby approve Nuclear Safety Requirements BSR-1.4.3-2017 “Human Resources of Organisations Implementing Licensed Activities in the Area of Nuclear Energy” (accompanying).

2. I hereby proclaim Order No. 57 of 29 December 2001 of the Head of the State Nuclear Power Safety Inspectorate “On General Requirements for Management of Personnel of Organisations Operating Nuclear Facilities and Entities Providing Services to Such Organisations (VD-E-11-2001)” to be invalid.

3. I hereby establish that the Order herein shall come into force as from 1 November 2017.

Head’s Assistant for Radiation Protection,
Acting Head of the State Nuclear Power Safety Inspectorate

Vidas Paulikas

APPROVED
By Order No. Nr. 22.3-160
of 20 September 2017 of the
Head of the State Nuclear Power
Safety Inspectorate

**NUCLEAR SAFETY REQUIREMENTS
BSR-1.4.3-2017**

**HUMAN RESOURCES OF ORGANISATIONS IMPLEMENTING LICENSED
ACTIVITIES IN THE AREA OF NUCLEAR ENERGY**

**CHAPTER I
GENERAL PROVISIONS, REFERENCES AND DEFINITIONS**

**SECTION ONE
GENERAL PROVISIONS**

1. Nuclear Safety Requirements BSR-1.4.3-2017 “Human Resources of Organisations Implementing Licensed Activities in the Area of Nuclear Energy” (hereinafter – the Requirements) set general requirements for the procedure of ensuring competence and other human capacities in respect of personnel of organisations pursuing licensed activities in the area of nuclear energy, as referred to in paragraph 2 of the Requirements (hereinafter – the organisation), and in respect of personnel of the supplier of product important for safety working at the nuclear facility (hereinafter – the NF personnel).

2. The Requirements shall be binding upon the holders of licences, the types of which are specified in subparagraphs 1-5 of paragraph 1 of Article 22 of the legal act referred to in subparagraph 4.2 of the Requirements, and upon the holders of permits, the types of which are specified in subparagraphs 1-5 of paragraph 2 of Article 22 of the legal act referred to in subparagraph 4.2 of the Requirements.

3. The requirements for training and instruction of the organisation’s personnel and the NF personnel are set forth in the legal act referred to in subparagraph 4.5 herein.

**SECTION TWO
REFERENCES**

4. The Requirements contain references to the following legal acts:

4.1. The Republic of Lithuania Law on Nuclear Energy;

4.2. The Republic of Lithuania Law on Nuclear Safety;

4.3. Nuclear Safety Requirements BSR-1.4.1-2016 “Management System”, as approved by Order No. 22.3-56 of 21 June 2010 of the Head of the State Nuclear Power Safety Inspectorate (hereinafter – the VATESI) “On the Approval of Nuclear Safety Requirements BSR-1.4.1-2016 “Management System”;

4.4. Nuclear Safety Requirements BSR-1.1.3-2016 “Inspections Performed by the State Nuclear Power Safety Inspectorate”, as approved by Order No 22.3-82 of 25 August 2011 of the Head of the VATESI “On the Approval of Nuclear Safety Requirements BSR-1.1.3-2016 “Inspections Performed by the State Nuclear Power Safety Inspectorate”;

4.5. Nuclear Safety Requirements BSR-1.9.4-2019 “Description of Procedure for Training and Instruction on the Subject of Radiation Protection of Employees Conducting Activities Involving the Ionising Radiation Sources, Persons Responsible for Radiation Protection and Persons Responsible

for Physical Security, and Procedure for Certification of Natural Persons Seeking to Obtain the Right to Provide Training on the Subject of Radiation Protection”, as approved by Order No 22.3-73 of 29 April 2016 of the Head of the VATESI “On the Approval of Description of Procedure for Training and Instruction on the Subject of Radiation Protection of Employees Conducting Activities Involving the Ionising Radiation Sources, Persons Responsible for Radiation Protection and Persons Responsible for Physical Security, and Procedure for Certification of Natural Persons Seeking to Obtain the Right to Provide Training on the Subject of Radiation Protection”.

Subparagraph amendments:

No. [22.3-231](#), dated 25 September 2019, published on the Register of Legal Acts on 25 September 2019, ID code 2019-15095

SECTION THREE DEFINITIONS

5. The terms and concepts used in the Requirements shall bear the following meanings:

5.1. **Nuclear facility managers** – senior management of the applicant and holder of the licences specified in subparagraphs 1-5 of paragraph 1 of Article 22 of the Republic of Lithuania Law on Nuclear Safety who are responsible for ensuring nuclear safety, radiation protection, physical security and fulfilment of non-proliferation commitments as well as for independent supervision of execution of such processes (the head of the organisation and assistants thereof, the heads of organisational units directly subordinate to the head of the organisation).

5.2. **Nuclear facility operators** – persons operating the technological process of the nuclear facility, using the structures, systems and/or components relating to such process, also persons conducting technical maintenance of construction of structures, systems and components important for safety of the nuclear facility.

5.3. **Initial training of personnel** – training of a newly hired employee and newly promoted employee in view of his/her current qualification and position, whereby he/she is provided with knowledge and skills that are necessary to fulfil appropriately the functions specified in his/her job description.

5.4. **Competence of personnel** – employee’s educational background, knowledge, skills, professional experience and personal characteristics that are necessary to fulfil the assigned functions in a safe and effective manner, as set forth in the job description or other documents of the organisation.

5.5. **Positions important for safety of the nuclear facility** – positions of the nuclear facility managers, positions of the nuclear facility operators who plan, coordinate and decide on activities and/or actions relating to ensuring nuclear safety, radiation protection, physical security and fulfilment of non-proliferation commitments, including the positions of nuclear facility personnel responsible for independent assessment of ensuring nuclear safety, radiation protection and physical security.

5.6. Other terms and concepts used herein shall bear the meanings defined in the legal acts referred to in subparagraphs 4.1-4.3 of the Requirements, also in other nuclear safety requirements and rules.

Subparagraph amendments:

No. [22.3-231](#), dated 25 September 2019, published on the Register of Legal Acts on 25 September 2019, ID code 2019-15095

CHAPTER II GENERAL REQUIREMENTS FOR HUMAN RESOURCE MANAGEMENT

6. The measures necessary to ensure and maintain competence of the organisation’s personnel and the NF personnel, which predetermine the organisation’s capability to pursue the activities in line with the requirements of the technical normative documents on nuclear safety, shall be specified in the organisation’s management system documentation.

7. The organisation shall have in place a documented procedure for training, examination and knowledge assessment of the organisation's personnel and the NF personnel.

8. The organisation shall have in place administrative and/or technical measures ensuring that the organisation's personnel and the NF personnel are not under the influence of alcohol, narcotic, psychotropic substances, and that their health condition is fit for duty.

9. The nuclear facility operators (hereinafter – the NF operators) may start working independently only if their knowledge and skills have been examined and only when their knowledge and skills have been certified as adequate for independent fulfilment of the functions assigned to them, in accordance with the procedure set in the organisation's management system documentation.

10. Based on the description of the organisation's structure and justification thereof, which is drafted in accordance with subparagraph 40.1.3 of the legal act referred to in subparagraph 4.3 of the Requirements, the organisation shall prepare the list of positions important for safety of the nuclear facility (hereinafter – the positions important for safety), which shall specify the minimum required number of such positions within the organisation, the number of employees holding such positions and, if they work in shifts, the number of employees holding such positions per shift. In the event of changes in the description of the organisation's structure and justification thereof, the list of positions important for safety shall be updated. The list of positions important for safety shall cover: the positions of personnel managing the nuclear facility (hereinafter – the NF managers); the positions of the NF operators who plan, coordinate and decide on activities and/or actions relating to ensuring nuclear safety, radiation protection, physical security and fulfilment of non-proliferation commitments; the positions of the organisation's personnel who arrange and/or conduct audits and independent verifications of the processes relating to ensuring nuclear safety, radiation protection, physical security at the NF and fulfilment of non-proliferation commitments.

11. The organisation shall ensure that the structures, systems and components important for safety of the NF are operated only by the organisation's personnel or the NF personnel who have obtained the relevant authorisation. In its management system documentation, the organisation shall define the procedure for granting and cancelling the authorisation to operate structures, systems and components important for safety.

12. The organisation shall make sure that the number of employees holding positions important for safety of the NF is not less than the number of such employees justified in the NF safety supporting documents based on paragraph 71 of the legal act referred to in subparagraph 4.3 of the Requirements and, if they work in shifts, not less than the minimum required number of such employees per shift justified in the NF safety supporting documents.

13. The organisation shall assess appropriateness of competence and adequacy of number of employees holding positions important for safety in order to ensure performance of licensed activities in a safe manner (assess the adequacy of human resources).

14. The organisation shall have adequate human resources to ensure that in case of any potential scenario of unusual event, the conditions of the NF operation are restored to become the same as those specified in the NF design.

15. As the organisation plans its licensed activities, anticipates changes in the stages of the NF lifecycle, takes into account redundancies due to objective and known circumstances (for instance, achievement of retirement age), the organisation shall elaborate a long-term competence needs plan covering a period not shorter than ten years for personnel holding positions important for safety. If such ten-year period covers several stages of the NF lifecycle, the organisation's long-term competence needs plan for personnel holding positions important for safety shall stipulate as to how it plans to ensure competence of personnel holding positions important for safety during each stage of the NF lifecycle.

16. Based on the plan referred to in paragraph 15 of the Requirements, the organisation shall elaborate a medium-term plan covering a period of five years for recruitment and training of personnel holding positions important for safety.

17. The organisation shall assess the process of planning of human resources on a periodic basis at least once over two years, by taking into account execution of the plan for recruitment and/or

training of personnel holding positions important for safety, the results of assessment of adequacy of human resources, as stipulated in paragraph 13 of the Requirements, and other factual data.

18. Data pertaining to establishment of competence, training and certification of the NF personnel holding positions important for safety shall be documented and retained for at least 5 years.

CHAPTER III SELECTION OF PERSONNEL

19. Selection of the organisation's personnel shall be conducted in accordance with the procedure set forth in the organisation's management system documentation to the extent it is not regulated under the legal acts regulating employment relations, as well as in accordance with the qualification requirements for candidates approved in advance by the head of the organisation.

20. The head of the organisational unit where an employee is expected to hold the position important for safety shall take part in the assessment of appropriateness of the employee to hold the position important for safety and in the approval of the final selection results.

21. The organisation shall set the following requirements for candidates to hold the positions important for safety (other than the positions of the NF managers):

21.1. educational background;

21.2. technical and technological knowledge necessary to fulfil the functions assigned in respect of the position;

21.3. knowledge of safety culture and security culture;

21.4. knowledge of operation principles of the NF, where the candidate applies to the position important for safety;

21.5. knowledge of principles of ensuring nuclear safety, radiation protection and/or physical security (applicable in view of the position applied to);

21.6. professional experience (in case it is required in view of the functions specified in the job description);

21.7. management and leadership skills and management experience acquired in the same or related area of professional activities (applicable to candidates applying to the position of the head of the organisational unit);

21.8. analytical, problem-solving, communication skills;

21.9. qualification certificates certifying the right to engage in activities specified in the job description, if the legal acts provide for the requirement to obtain the qualification certificate in respect of the activities specified in the job description.

CHAPTER IV GENERAL REQUIREMENTS FOR TRAINING OF PERSONNEL

SECTION ONE SYSTEMIC APPROACH TO TRAINING

22. Organisation of personnel training process shall be based on a systemic approach, which means that training shall be organised in the following order: analysis of personnel competence needs, development of training programmes, preparation for implementation of training, implementation of training, evaluation and improvement of training organisation process.

23. The organisation's management system documentation shall define the requirements, including methods, means and responsibilities, in respect of the following stages of training delivered within the organisation:

23.1. analysis of personnel competence needs – establishment of requirements applicable to the functions assigned to personnel, the skill levels achieved and achievable, identification of areas of competence or qualification of personnel that need improvement;

23.2. development of training programmes – formulation of specific measurable training objectives, criteria for evaluation of achievement of training objectives, development of training plan and resources designated for its implementation;

23.3. preparation for implementation of training – establishment of applicable training methods and preparation of training material and means in view of the training programme objectives, experience and qualification level of employees who will receive training;

23.4. implementation of training – delivery of training in line with the training programmes approved by the organisation's senior management;

23.5. evaluation and improvement of training organisation process – overall evaluation of training implemented, training objectives achieved, training implementation experience, including feedback obtained from employees who attended training, identification of improvement possibilities for training programmes and methods.

24. The organisation's management system documentation shall define and apply controls, including criteria for evaluation, selection, effectiveness monitoring and re-evaluation of suppliers, which are applicable to the entire process of training or individual stages thereof, which is delivered to the organisation's personnel by the supplier of training services, in case the organisation decides to involve the external supplier, in full or in part, for delivery of training to the organisation's personnel.

25. The duration, programmes, methods and time intervals of initial and continuing training of personnel shall be defined in the organisation's management system documentation.

26. The continuing training shall be planned in view of the NF's safety and process condition, educational background of personnel, personnel certification results, and personnel professional experience.

27. If other legal acts provide for compulsory qualification training in respect of the particular area of professional activities, the organisation shall include such training in the training programme and ensure that such training is attended by the organisation's personnel and the NF personnel.

SECTION TWO

IMPLEMENTATION OF INITIAL AND CONTINUING TRAINING OF PERSONNEL

28. The organisation shall ensure delivery of initial and continuing training to its personnel based on the training programmes.

29. The contents and duration of initial training (hereinafter – the initial training) shall be defined in view of the competence requirements applicable to the position. Given the employee's qualification and professional experience, the initial training may have a shorter duration.

30. The requirements for the initial and continuing training of the NF personnel holding the positions important for safety and the NF operators shall be elaborated by those employees who have practical experience in the activities that are the subject of training and who have knowledge of the requirements applicable to the training organisation process.

31. At the time of the initial training, the employees who newly joined the NF shall be familiarised with the NF's purpose and operation, the requirements of the legal acts regulating the NF's activities, emergency preparedness, individual radiation protection measures, safety culture and security culture principles, workplace and prevailing professional risk factors. The initial training programmes shall provide an overall understanding of an employee's responsibilities, safe work practices, importance of compliance with the requirements and descriptions of work procedures defined within the organisation.

32. All personnel shall receive initial and continuing training on how to behave in case of unusual events.

33. The continuing training of personnel shall focus on strengthening their knowledge about the principles of ensuring the NF safety and their application in practice.

34. At least once over 5 years, the NF operators shall be provided with the continuing training in order to renew their technical and technological knowledge that is necessary to fulfil the functions specified in their job descriptions.

35. The continuing training shall be delivered in accordance with the qualification development plan approved by the organisation's senior management.

36. The heads of organisational units shall be responsible for the analysis of training needs of their subordinates and for the provision of conditions to attend the training.

SECTION THREE THE INITIAL AND CONTINUING TRAINING PROGRAMMES

37. The organisation shall be responsible for ensuring that the initial and continuing training programmes are elaborated for all positions.

38. The initial and continuing training programmes shall be followed in order to develop the professional competences of personnel that lead to successful implementation of the NF technologies in practice.

39. The initial and continuing training programmes shall help personnel understand the appropriate ways of execution of procedures and the consequences of potential failures.

40. The initial and continuing training programmes shall provide for the specific instructions as to how to avoid failures at work and how to deal with them.

41. Each training programme shall cover implementation of the principles of safety culture and security culture pertaining to the training objectives and shall focus on the importance of responsible attitude towards the tasks being fulfilled.

42. The training programmes that include training of how to use equipment shall cover practical training.

43. Each training programme shall specify:

43.1. the title of the programme, the target audience, and the training objectives;

43.2. the requirements for the competence of the programme instructor;

43.3. the training plan, contents and methods;

43.4. the person responsible for delivery of training (the trainer);

43.5. the criteria and procedures for evaluating the training results, including on-job evaluation criteria;

43.6. the programme developers, the organisational units involved in the programme co-ordination, the management member who approved the programme;

43.7. the programme approval date;

43.8. the deadline for review of the programme.

44. The training shall be delivered in line with the training programmes, the contents of which shall be reviewed and updated not later than 5 years before the training.

45. As the training programmes are updated, the comments and suggestions of the employees who attended the training and their direct superiors, as well as the specialists who were involved in delivery of training under the programmes, shall be taken into account.

46. The initial and continuing training programmes shall be updated in view of operating experience, the NI's modifications and other circumstances stipulated in the organisation's management system documentation.

SECTION FOUR MEANS OF TRAINING

47. For the purpose of training aimed at developing the competences important for safety, the organisation shall use simulators, models, mock-ups of equipment, tools or work environment (hereinafter – the models) and other means of training (for instance, computer-based 3D models). The organisation's management system documentation shall define the procedure for assessing

appropriateness of the means of training, including the procedure for re-assessing appropriateness of the means of training if modifications are made to the structures, systems and components important for safety of the NF in relation to such means of training within the organisation.

Paragraph amendments:

No. [22.3-231](#), dated 25 September 2019, published on the Register of Legal Acts on 25 September 2019, ID code 2019-15095

48. The organisation shall ensure appropriate premises, means and conditions for training. The training material intended for the participants shall render in a clear and visual manner knowledge about the operation of relevant NF structures, systems and components and different aspects of individual and organisational effectiveness. Detailed technical information shall be available during the training at the training premises and shall be used for reference.

49. As the organisation plans hazardous work (including work that is hazardous in terms of radiation protection), it shall evaluate expediency of using the models and other means of training that can help simulate the work process under real work conditions, but without being exposed to ionising radiation. As the organisation evaluates expediency of using such means of training, it shall find out whether in the event of absence of such means of training it will be possible to ensure smooth work with no unusual events, by following the established work procedure, minimising the time costs necessary to complete the work and the likelihood of spread of radioactive contamination. Having satisfied itself about expediency of using the means of training mentioned herein, the organisation shall make sure that they are used, as far as practicable, for improvement of skills and knowledge of personnel while preparing for hazardous work, including work that is hazardous in terms of radiation protection. The organisation's management system documentation shall describe the procedure for evaluating expediency and use of the models and other means of training. The evaluation of expediency of using such means of training shall be documented. When deciding about the use of the models and other means of training, it is recommended that information provided in Annex 4 to the Requirements be followed.

Paragraph amendments:

No. [22.3-231](#), dated 25 September 2019, published on the Register of Legal Acts on 25 September 2019, ID code 2019-15095

50. The organisation's management system documentation shall specify the procedure designed to ensure that information and means of training (the models, simulators, etc.) that are made available during the training correspond to real work conditions.

SECTION FIVE ENSURING COMPETENCE OF INSTRUCTORS INVOLVED IN TRAINING OF EMPLOYEES

51. The organisation shall ensure that the instructors involved in training of personnel have subject-specific competence, understand teaching and learnings peculiarities, follow systematic approach to training, and have teaching skills.

52. The organisation shall establish measures for maintenance and improvement of professional qualification of instructors in the fields of subject-specific competences and teaching methods.

53. The instructors shall be familiarised with modifications to structures, systems and components important for safety of the NF, the history of nuclear and radiological incidents, accidents and other unusual events in their own NF and other NFs, as well as with their cases and corrective measures taken.

54. If the nuclear facility is a nuclear power plant, the organisation shall have the unit responsible for ensuring competence of the NF personnel.

CHAPTER V
ENSURING COMPETENCE OF THE NUCLEAR POWER PLANT PERSONNEL

SECTION ONE
TRAINING OF THE NUCLEAR POWER PLANT PERSONNEL HOLDING POSITIONS
IMPORTANT FOR SAFETY

55. The heads of units of the nuclear power plant (hereinafter – the NPP) shall be instructed to focus on safety as an overriding priority compared to all other objectives and tasks, explain the principles of safety culture and security culture and their implementation in practice in collaboration with other interested parties, and emphasise proper attitude of subordinates towards safety education, primarily through personal example of the head of the unit.

56. The heads of the NPP units shall be trained how to organise appropriately implementation of modifications, including their planning, leading and supervising the process of implementation, and assessing the results.

57. The heads of the NPP units shall take part in training courses indicated in the qualification development programmes, where they develop their skills in the fields of management, leadership, on-the-job training of subordinates, analysis of root causes of unusual events, and teambuilding, and where they obtain experience and knowledge relevant for fulfilment of their functions.

58. The NPP personnel holding positions important for safety shall be trained how to analyse, assess impact of human and organisational factors on safety, they shall be familiarised with operating experience and analysis techniques of unusual events.

59. At the time of initial training, the NPP personnel holding positions important for safety shall be familiarised with the NPP's design basis.

SECTION TWO
ENSURING COMPETENCE OF THE NPP'S CONTROL ROOM PERSONNEL

60. The initial training of the NPP's control room personnel shall last not less than one year, during which the control room personnel shall:

60.1. update theoretical knowledge in the fields of physics and nuclear engineering necessary to fulfil their functions, and learn how to apply such knowledge in practice;

60.2. obtain understanding of limitations and conditions of the NPP operation;

60.3. obtain understanding of the NPP systems, principles and purpose of their operation.

61. For the development of practical skills of the NPP's control room personnel, the control room simulator of the NPP shall be used during the initial training for not less than 80 days (if the training takes 8 academic hours per day).

62. During the initial training, the NPP's control room personnel shall acquire skills of timely detection, correct interpretation and implementation of the necessary actions in response to changes in the NPP parameters that may cause nuclear or radiological accident or any other unusual events.

63. During the initial training, the NPP's control room personnel shall be trained how to monitor and control the condition of nuclear reactor, undertake control actions and collaborate with the rest of the shift crew members.

64. During the initial and continuing training of the NPP's control room personnel, the control room simulator of the NPP shall be used. The control room simulator of the NPP (equipment, appliances, software) shall have the features of operation of the nuclear reactor and shall reflect real work conditions and environment of control room personnel of the NPP, including the location and scale of appliances in the control room.

65. During the initial and continuing training of the NPP's control room personnel, the control room simulator of the NPP shall be used in a way that ensures their effective practical preparedness

to act under normal operation conditions as well as in event of deviation from normal operation conditions, including radiological and nuclear accidents.

66. The NPP's control room personnel shall have knowledge of how the NPP safety assurance systems work and how to select appropriate subsequent actions in the event of their failure.

67. All the NPP's control room crew members of the same shift shall attend the initial and continuing training with the NPP control room simulator at the same time in order to develop their teamwork skills.

68. The initial training of the NPP's control room personnel with the NPP control room simulator shall cover training of how to fulfil the NPP control tasks under normal operation conditions as well as in the event of deviation from normal operation conditions, including radiological and nuclear accidents.

69. The initial training of the NPP's control room personnel with the NPP control room simulator shall be held at least once per year and shall last not less than 5 days (if the training takes 8 academic hours per day). Such training shall cover:

69.1. updating of knowledge and skills that are critical to the NPP safety;

69.2. learning of less frequent control actions of nuclear reactor transitions (for instance, launching, shutdown of a power unit);

69.3. learning of how to respond in the event of deviation from normal operation conditions, including radiological and nuclear accidents.

70. The continuing training of the NPP's control room personnel may not involve the use of the NPP control room simulator, provided the NPP's power units have been completely shut down and the organisation elaborates and justifies the measures that are expected to ensure the required competence of the related personnel.

SECTION THREE TRAINING OF THE NUCLEAR FACILITY OPERATORS, WHEN THE NUCLEAR FFACILITY IS A NUCLEAR POWER PLANT (THE NPP OPERATORS)

71. During the initial training, the NPP operators shall be trained and obtain theoretical and practical knowledge about the NPP structures, systems and components, their location and operation to ensure that the NPP operators are competent to fulfil the functions assigned to them.

72. The NPP operators shall have knowledge of limitations and conditions applicable in respect of safe operation of the NPP, and shall understand the consequences of failure to comply with them.

73. In order to prevent re-occurrence of unusual events, no later than at the time of the nearest scheduled continuing training, the NPP operators shall be notified about the nuclear and radiological incidents, accidents and other unusual events that actually took place at their own NF or any other NF, and shall be familiarised with their causes and corrective measures.

CHAPTER VI CERTIFICATION OF PERSONNEL

74. Based on the Requirements, the NF design and in view of the functions assigned to personnel, and the IAEA documentation, the organisation shall stipulate in its management system documentation and agree with the VATESI about the description of procedure for competence assessment of the NF operators. The head of the VATESI shall make decision on approval of the description of procedure for competence assessment of the NF operators within 20 working days from the date of receipt of the aforementioned document. The decision on disapproval of the aforementioned document shall be made in case the document is not in conformity with the Requirements.

75. Knowledge and skills of personnel holding positions important for safety shall be subject to assessment at the time of certification by the organisation's certification commission.

76. Personnel holding positions important for safety shall be subject to certification on a periodic basis, but not less than once over 5 years.

77. The NF managers shall be subject to certification in accordance with the procedure established by the Government of the Republic of Lithuania.

78. No later than 20 working days prior to the scheduled certification of the NPP personnel holding positions important for safety, the organisation shall provide the VATESI with information about the certification (full name, job title, certification date, time, place, certification purpose, qualification requirements of the person subject to certification).

79. In case of certification of the NPP personnel holding positions important for safety and responsible for nuclear safety, such certification shall be attended by a duly authorised permanent employee appointed by the head of the VATESI to participate at the certification with the rights of an observer, who observes whether the certification is conducted in line with the requirements of the technical normative documents on nuclear safety. In case of certification of other personnel holding positions important for safety, attendance (with the rights of an observer) shall be arbitrary.

80. During the formation of certification commissions of personnel holding positions important for safety, it shall be ensured that:

80.1. the members of the certification commission have no less than three years of professional experience in the field of nuclear energy;

80.2. the certification commission includes employees whose educational background and/or professional experience is compatible with the nature of work of employees who are subject to certification;

80.3. the certification process is objective and impartial.

81. In case of certification of the NPP's control room personnel, their theoretical knowledge in the field of nuclear physics and applied nuclear technologies at the NPP as well as practical skills of the NPP operation shall be checked.

82. Personnel holding positions important for safety shall be subject to re-certification prior to expiry of a three-year term, when:

82.1. an employee is transferred to the position, the fulfilment of which is subject to different and/or higher competence requirements;

82.2. an employee fails to fulfil the position important for safety for ninety days in a row or longer (for instance, in case of absence from work, vacation).

RECOMMENDATIONS ON USE OF MODELS AND OTHER MEANS OF TRAINING THAT CAN HELP SIMULATE THE WORK PROCESS UNDER REAL WORK CONDITIONS

1. The models and other means of training that can help simulate the work process under real work conditions shall be used as means of training aimed at strengthening the professional skills of employees, improving their understanding of work environment, work specifics and related threats, and enabling them to prepare for such threats.
2. Use of models and other means of training is recommended when:
 - 2.1. work is performed for the first time or work is carried out on one-off basis;
 - 2.2. new tools or equipment are brought into use;
 - 2.3. work is carried out at very tight premises and this may lead to changes in work specifics and threats associated with such work;
 - 2.4. it is necessary to elaborate or improve the work process;
 - 2.5. it is necessary to improve teamwork skills in the environment of ionising radiation;
 - 2.6. it is necessary to test personal protective equipment under real work conditions (for instance, use of full body suit with forced supply of breathable air at a workplace with various obstructions to mobility);
 - 2.7. it is necessary to minimise spread of radioactive contamination by means of sanitary lock (for instance, enhancement of skills of employees at the time of changing clothing);
 - 2.8. for the purpose of radiation protection, the duration for completion of work shall be established;
 - 2.9. it is necessary to train employees how to respond to unusual events that may occur at time of work (for instance, evacuation of an injured employee from the workplace, when evacuation may be complex).

Supplementation with an annex:

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Amendments:

1.

The State Nuclear Power Safety Inspectorate, Order

No. [22.3-231](#), dated 25 September 2019, published on the Register of Legal Acts on 25 September 2019, ID code 2019-15095

On Amendment of Order No 22.3-160 of 20 September 2017 of the Head of the State Nuclear Power Safety Inspectorate “On Approval of Nuclear Safety Requirements BSR-1.4.3-2017 “Human Resources of Organisations Implementing Licensed Activities in the Area of Nuclear Energy”