



Úrad jadrového dozoru Slovenskej republiky

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No.: 6874/2018

Slovenské elektrárne, a.s.
Plant Units 3&4 Mochovce NPP
935 39 Mochovce

DECISION No. 2 7 7 / 2 0 1 8

The Nuclear Regulatory Authority of the Slovak Republic (hereinafter the “Authority“ or “ÚJD SR“), as the competent administrative authority pursuant to Sections 5 and 46 of the Act No. 71/1967 Coll. on administrative proceeding (Administrative Procedure Code) as amended (hereinafter the “Administrative Procedure Code“), pursuant to Section 4 par. (1) (d) taking into account Section 8 par. (3) of Act No. 541/2004 Coll. on peaceful use of nuclear energy (the Atomic Act) and on amendments to certain laws as amended (the “Atomic Act“)

Issues an authorization

for Slovenské elektrárne, a.s., BIC: 358 29 052, with its seat in Bratislava, Mlynské Nivy 47, 821 09 Bratislava 2, with the place of business Units 3&4 of Mochovce power plants, 935 39 Mochovce, incorporated in the Commercial Register of the District Court Bratislava 1, No.: Sa 2904/B,

for the management of nuclear materials in the nuclear installation

Nuclear Power Plant Mochovce, project 3,

**Pursuant to 5 par. (3) (g) of the Atomic Act in the scope of handling and storage of
fresh nuclear fuel in the fresh fuel node.**

Rationale

ÚJD SR, on the basis of your application from 12 December 2016 ref. No. SE/2016/077759, registered at the Authority under reg. No. 7604/2016 in the file No. 3720-2016, on 12 December 2016 initiated an administrative proceeding related to the application of Slovenské elektrárne (the “SE, a.s.”) for:

- Authorization for the management of nuclear materials in the nuclear installation of Nuclear Power Plant Mochovce, project 3 (the “MO3&4“), in the scope of handling

and storage of fresh nuclear fuel in the fresh fuel node, m. č. A407 pursuant to Section 5 par. (3) (g) of the Atomic Act (the “Administrative proceeding No. 1.1“).

Slovenské elektrárne, a.s. in its letter ref. No. SE/2016/077759 dated 12 December 2016, in addition to applying for the authorization for the management of nuclear materials in the nuclear installation Nuclear Power Plant Mochovce, project 3 in the scope of handling and storage of fresh nuclear fuel in the fresh fuel node, m. č. A407 pursuant to Section 5 par. (3) (g) of the Atomic Act, which is the subject of this Decision, applied for other authorizations:

- Authorization for the commissioning of the nuclear installation in the scope of handling and storage of fresh nuclear fuel in the fresh fuel node, m. No. A407 pursuant to Section 5 par. (3) (b) of the Atomic Act (the “Administrative proceeding No. 1.2“),
- Permit for an early use of the structure MO3&4 pursuant to Section 83 Act No. 50/1976 Coll. on spatial planning and building regulations (the Building Act) as amended (the “Building Act“) and pursuant to Section 5 par. (3) (b) and Section 19 par. (3) of the Atomic Act part of the structure in the scope of handling and storage of nuclear fuel in the fresh fuel node (hereinafter the “Administrative proceeding No. 1.3“),
- Authorization for the management of radioactive waste and spent nuclear fuel pursuant to Section 5 par. (3) (f) of the Atomic Act in the scope of objects and facilities for the operation of Unit 3, and in the scope of objects and facilities common for Units 3&4, serving for operation of Unit 3, including the fresh fuel node (hereinafter the “Administrative Proceeding No. 2.1“),
- Authorization for the commissioning of nuclear installation pursuant to Section 5 par. (3) (b) of the Atomic Act in the scope of objects and facilities for the operation of Unit 3 and in the scope of objects and facilities common for Units 3&4, serving for operation of Unit 3 (hereinafter the “Administrative Proceeding No. 2.2“),
- Permit for an early use of the structure pursuant to Section 83 of the Building Act, and pursuant to Section 5 par. (3) (b) of the Atomic Act, and Section 19 par. (3) of the Atomic Act in the scope of objects and facilities for the operation of Unit 3, and in the scope of objects and facilities common for Units 3&4, serving for operation of Unit 3 (hereinafter only as “Administrative Proceeding No. 2.3“),
- Authorization for the management of radioactive waste and spent nuclear fuel pursuant to Section 5 par. (3) (f) of the Atomic Act in the scope of objects and facilities for the operation of Unit 4, and in the scope of objects and facilities common for Units 3&4, serving for operation of Unit 4 (hereinafter only as the “Administrative Proceeding No. 3.1“),
- Authorization for the commissioning of nuclear installation pursuant to Section 5 par. (3) (b) of the Atomic Act in the scope of objects and facilities for the operation of Unit 4 and in the scope of objects and facilities common for Units 3&4, serving for operation of Unit 4 (hereinafter only as the “Administrative Proceeding No. 3.2“),
- Permit for an early use of the structure pursuant to Section 83 of the Building Act, and pursuant to Section 5 par. (3) (b) of the Atomic Act and Section 19 par. (3) of the Atomic Act in the scope of objects and facilities for the operation of Unit 4, and in the scope of objects and facilities common for Units 3&4, serving for operation of Unit 4 (hereinafter only as the “Administrative Proceeding No. 3.3“).

The Authority informed on initiation of these administrative proceedings all the parties in writing. Issue of permits in the administrative proceedings Nos. 1.2, 1.3., 2.1, 2.2, 2.3, 3.1, 3.2, 3.3 is not the subject of this Decision.

Documentation of the administrative proceeding No. 1.1 and other administrative proceedings related to the application of SE, a.s., for an authorization for the commissioning of nuclear installation of MO&34 (Administrative Proceedings Nos. 1.2, 1.3, 2.1, 2.2, 2.3, 3.1, 3.2 a 3.3) with removed sensitive information according to their definition in Section 3 par. (16) and (17) of the Atomic Act, was made available by the Nuclear Regulatory Authority of SR from 16 March 2017 until 30 June 2017 in the rented premises in Mochovce.

After reviewing the documentation submitted, the Authority concluded that the applicant must complete his filing, and interrupted the administrative proceeding Nos. 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 3.1, 3.2 and 3.3 by the Authority's Decision No. 334/2017 dated 23 August 2017. At the same time, it invited the applicant to remove, pursuant to Section 19 par. (3) of the Administrative Procedure Code, taking into account Section 3 par. (4) of the Administrative Procedure Code, the deficiencies in the filing by 15 February 2018. Deficiencies in the filing of the administrative proceedings No. 1.1 were listed in Annex 1 to the Authority's letter reg. No. 5260/2017 dated 22 August 2017 and related to the submitted documentation of the administrative proceeding (Pre-operational Safety Report for MO3&4 and the Plan for management of radioactive waste and spent nuclear fuel, including their shipment). At the same time, the Authority invited the applicant to submit the protocols on the readiness of the fresh fuel node or a document on the readiness of all the equipment of the fresh fuel node to the Authority not later than 12 months from the date of delivery of the decision on interrupting the above-mentioned administrative proceedings.

Slovenské elektrárne, a.s., gradually submitted to the Authority documentation with removed deficiencies. The Authority has continuously evaluated the removal of deficiencies in the documentation. With the letter, reg. No. 768/2018 dated 13 February 2018, it confirmed the removal of deficiencies in the filing of the Pre-operational Safety Report for MO3&4 and letter reg. No. 766/2018 dated 07 February 2018 confirmed removal of deficiencies in the filing of the Plan for the management of radioactive waste and spent nuclear fuel, including their shipment. SE, a.s., removed the deficiencies in the documentation in question within the deadline, which was in line with the request in the decision on interrupting the administrative proceedings (i. e. earlier than 15 February 2018).

SE, a.s., on 22 June 2018 supplemented its filings related to application for authorization referred to in the operative part of this Decision and the administrative proceedings No. 1.2 and 1.3. The Authority carried out a preliminary assessment of the additions in the filings related to the administrative proceedings Nos. 1.1, 1.2 and 1.3, stating that Slovenské elektrárne, a.s., by completing the filing dated 22 June 2018 it fulfilled all the conditions of the Authority's Decision No. 334/2017 for the continuation in the proceedings in question.

Subsequently, the Authority with its letters reg. Nos. 4339/2018, 4531/2018 and 4526/2018 dated 17 July 2018, informed all the parties in writing that the administrative proceedings Nos. 1.1, 1.2 and 1.3 continue as of 22 June 2018. Supporting documentation for the decision in the administrative proceedings were published at the website of the Authority as the "documentation for the UČP Decision". The Authority invited the parties in writing to comment on the supporting documentation for the Decision not later than 27 August 2018. The Authority subsequently extended the period at the request of one of the parties to

comment on the supporting documentation for the Decision until 14 September 2018. The parties were informed in writing about the extension of the time limit by letters reg. Nos. 5418/2018, 5422/2018 and 5425/2018 dated 27 August 2018.

After completing the filing, the Authority reviewed the documentation for the administrative proceeding No. 1.1 in the following scope:

- 1) Identification data according to Section 6 par. (1) (b) of the Atomic Act.
The applicant submitted the relevant identification data as required by Section 6 par. (1) (b) of the Atomic Act in the filing from 12 December 2016. The applicant confirmed in its completed filing from 22 June 2018 that the data remain unchanged when compared to the date submitted on 12 December 2016.
- 2) Description of the activity, for which he is seeking authorization pursuant to Section 6 par. (1) (c) of the Atomic Act.
The applicant clearly defined the activities, for which he is seeking authorization. It is the operation of the fresh fuel node, in which the fresh nuclear fuel will be handled and stored. The description of the activity, for which the authorization is requested, was submitted by the applicant in the filing of 12 December 2016.
- 3) Evidence of the integrity of the company and members of statutory body of the company pursuant to Section 6 par. (2) (a) of the Atomic Act
The applicant submitted abstracts from the Criminal Record Registry of the General Prosecutor's Office of SR for all members of the statutory body of the company and an extract from the Criminal Record of the General Prosecutor's Office of SR on the legal person Slovenské elektrárne, a.s. on 12 December 2016. The updated extracts were submitted also in the completed filing from 22 June 2018. All extracts were without a record.
- 4) Extract from the Commercial Registry pursuant to Section 6 par. (2) (b) of the Atomic Act.
The applicant submitted extract from the Commercial Registry of the District Court of Bratislava I as of 17 May 2018.
- 5) Evidence of the functional technical equipment of the applicant for the required activity pursuant to Section 6 par. (2) (e) of the Atomic Act.
The applicant submitted to the Authority documents on the preparedness of the nuclear facility for commissioning in the scope of the fresh fuel node. Subsequently the Authority carried out inspection No. 404/2018, which focused on the completeness and correctness of protocols on the functional testing of all systems related to the operation of the fresh fuel node and handling and storage of fresh nuclear fuel. The subject of inspection was the implementation of the following programs:
Program 3P010 – Program of testing equipment for receiving, storage and transport of fresh fuel,
Program 3P053A – Program of functional tests of radiation protection in Main Generation Unit, Unit 3,
Program 3P053C – Program of functional tests of radiation control – Electrical part, Unit 3,
Program 3P056B – Program of functional test of ventilation of the air-tight zone of Unit 3,
Program 3P056C – Program of functional tests of air supply systems for the ventilation systems of Unit 3,
Program 3P097 – Fire protection system Unit 3,
Program 3P101 – Program of tests for communication equipment and data network Unit 3,

Program 3P114 – Program FUS outlets from switchboards 6 kV and 0.4 kV for supply of energy consumers,

Program 3P160 – Program of tests for secondary switchboards LV, Unit 3.

The result of the inspection by the Authority is a finding that the fresh fuel node is operational and ready to receive fresh nuclear fuel.

- 6) Evidence that the applicant has permanent staff with the required expertise pursuant to Section 6 par. (2) (e) of the Atomic Act and an evidence on the number of permanent staff indicating their expertise pursuant to Section 6 par. (2) (i) of the Atomic Act.

The applicant submitted analysis of the capacity of the fuel management unit with scheduled activities for operation and maintenance of equipment of EMO1&2 and MO3&4 Units and new systematization of the fuel management unit as at 1 June 2018. The result of the analysis is to demonstrate the ability of the fuel management unit to provide all activities related to the operational and maintenance of the equipment needed for the management of fresh nuclear fuel in MO3&4.

- 7) Evidence on providing for the radioactive waste management including its financial coverage pursuant to Section 6 par. (2) (f) of the Atomic Act.

The applicant submitted evidence on radioactive waste management including its financial coverage in the filing from 12 December 2016. The Authority has requested the addition of some data (contained in the list of deficiencies in the filing in Annex 1 to the letter reg. No. 5263/2017 from 22 August 2017). Subsequently, the applicant supplemented required data in the letter of 13 November 2017. The Authority carried out an inspection No. 230/2017, which confirmed the completeness and correctness of supplemented data. The Authority confirmed removal of deficiencies in the filing by letter reg. No. 395/2018 from 22 January 2018.

- 8) Evidence on the ownership and organizational structure of the applicant pursuant to Section 6 par. (2) (g) of the Atomic Act.

The applicant submitted an extract from the Commercial Registry of the District Court of Bratislava I dated 17 May 2018 and the organizational structure and systemization of MO3&4 plant and unit B4000 letter of 2 November 2017.

- 9) Documentation required by the Building Act for an early use of the structure pursuant to Section 6 par. (2) (j) of the Atomic Act was submitted for inspection connected with local survey for the fresh fuel node.

- 10) Activities according to Section 12 par. (4) in connection with Section 5 par. (3) (g) of the Atomic Act:

a) Types of nuclear materials: In accordance with the design of Units 3&4 of Mochovce NPP the storage of fresh fuel is designed for storage of unprofiled assemblies of 2nd generation and profiled assemblies with medium enrichment of 4.87%²³⁵U, containing burning-up absorber (gadolinium). The mass share of ²³⁵U in unprofiled assemblies equals to 1.6%, or 2.4%, or 3.6%. In the profiled fuel assemblies there are 6 fuel rods and their fuel pellets contain 3.35% gadolinium (mass), fulfilling the function of a burning-up absorber.

b) The activities, for which the nuclear material will be used: activities associated with the fresh fuel node, in particular receiving and storage of fresh nuclear fuel, the change of position and control of surface cleanliness and the geometric shape before loading to the reactor core. The node also serves for storage and replacement of emergency-regulatory-compensation assemblies prior to their use.

- 11) Data required by a special regulation “Treaty establishing the European Atomic Energy Community” pursuant to Section 12 par. (5), of the Commission Regulation (Euratom) 302/2005 of 8 February 2005 on the application of the Euratom safeguards system.

The applicant submitted a letter SE/2016/067700 on sending the basic technical characteristics (hereinafter as the “BTC”) to the ÚJD SR and letter SE/2016/007696 on

sending BTC to the European Commission, the annex of which was the Report on basic technical parameters for the MO3&4 site. The submission of the report is in accordance with Article 4 of the Commission Regulation (Euratom) 302/2005.

- 12) Liability insurance for nuclear damage pursuant to Section 7 par. (1) and (2) of Act No. 54/2015 Coll. on civil liability for nuclear damage and its financial coverage and on amendments to certain laws.

The applicant submitted an Insurance Policy for the liability insurance of a nuclear facility operator in the Mochovce site for damage caused by a nuclear incident No. 03/2016/SE-EMO3/KSJPP.

The Authority divided the application of SE for authorizations related to commissioning of MO3&4 for administrative proceeding 1.1, 1.2 and 1.3 (related to the fresh fuel node), 2.1, 2.2 and 2.3 (related to Unit 3 of MO3&4) and 3.1, 3.2 and 3.3 (related to Unit 4 of MO3&4) due to a dual-unit structure of MO3&4 and the time sequence of predicted activities during sequential preparation of equipment, systems and objects of MO3&4 for commissioning. Part of the documentation submitted by SE, a.s., relates to only the fresh fuel node, part of the documentation demonstrates compliance with the requirements of applicable laws not only for the fresh fuel node (for the administrative proceeding No. 1.1), but also for Unit 3, Unit 4 or for nuclear installation of MO3&4 as a whole – in particular, documentation referred to in points 7), 11) and 12) of this reasoning. The Authority evaluated this documentation in full, which in fact exceeds the scope required for the administrative proceeding 1.1.

SE, a.s. with the letter SE/2018/003485 of 12 January 2018 submitted to the Authority a document “Fulfilment of the binding conditions of the building permit No. 2010/86, the ÚJD SR Decision Nos. 246/2008, 266/2008 and 267/2008“. This document supplements and specifies an analogous document submitted to the Authority together with the SE’s application on 12 December 2016. Updating of the document in question was carried out as part of fulfilment of conditions of the ÚJD SR Decision No. 334/2017, and the Authority accepted it with its letter reg. No. 897/2018 dated 14 February 2018. This document confirms compliance with the conditions of the Authority’s Decision No. 246/2008 of 14 August 2008, No. 266/2008 dated 14 August 2008 and No. 267/2008 dated 14 August 2008 for the whole project of MO3&4. Only a small part of the conditions of the Authority’s Decision No. 266/2008 and 267/2008 relates to the management of fresh nuclear fuel in the fresh fuel node, and even that mostly indirectly. For this reason, the Authority considers that documenting compliance with the conditions of the Decisions Nos. 266/2008 and 267/2008 in the document “Compliance with the binding conditions of the building permit No. 2010/86, ÚJD SR Decision Nos. 246/2008, 266/2008 and 267/2008“ as sufficient in relation to the administrative proceeding 1.1 and exceeding the needs of the above mentioned proceeding. The fulfilment of the conditions of the Decision No. 266/2008, related to the fresh fuel node, is as follows:

- Condition Nos. 1 and 2 (Condition No. 1: “In line with the best international practice, the design of the nuclear installations of Units 3&4 of Mochovce should be finalized with a reference scenario of events involving a deterministic effect from external source, e.g. an impact of a small aircraft and submit it to the Authority for review” and condition No. 2: “Based on the scenario developed under condition No. 1 to assess the functional potential for resistance of the design of Units 3&4 of Mochovce NPP and to apply appropriate additional systems, structures or components in the design, as well as strategies for management of a nuclear power plant in order to ensure its resistance to possible deterministic effects from an external source, such as for example, deliberate impact of a small aircraft, in a way to bring the project in line with

the best international practice. Relevant changes to the basic design to be submitted to the Authority in accordance with the applicable legislation“). SE, a.s., submitted to the Authority the relevant documents. Their content is classified. The Authority issued a Decision No. 290/2010 dated 16 August 2010, authorizing construction of a protective barrier. The related documentation is subject to secrecy regime under Act No. 215/2004 Coll. on the protection of classified information and on amendments to certain laws, and therefore was not made available to the public. The Authority considers conditions Nos. 1 and 2 of the Decision No. 266/2008 being fulfilled.

- Conditions No. 4, 5, and 6 (to complete the calculations of seismic resistance of equipment, the seismic resistance of which is required by the basic design and their verification by an independent organization, develop a manual for authors of implementation projects for calculations of anchoring of components the seismic resistance of which is required, and to ensure independent control of implementation projects of all operational sets involving seismically qualified components). SE, a.s. submitted to the Authority the required documentation, and the Authority confirmed compliance with conditions 4, 5 and 6 of the Decision No. 266/2008 in writing. The fresh fuel node and its facilities are seismically reinforced in accordance with the terms of the Authority's Decision No. 266/2008.

Other conditions of Decision No. 266/2008 are not related to the fresh fuel node. Their fulfilment will be subject of assessment in administrative proceedings Nos. 2.1, 2.2, 3.1 and 3.2. Meeting the conditions of the Authority's Decision No. 267/2008, related to the fresh fuel node is incorporated in the relevant chapters of the Pre-operational Safety Report for MO3&4 (hereinafter only as “PSR MO3&4”):

- Condition No. 5 from the annex to the Decision (Complete chapter No. 7.4.20 of the Report so that the compliance with the requirements of the ÚJD SR Decree No. 50/2006 Coll., Annex 3 part B II. E. (2) (a) point 2 is sufficiently demonstrated, while taking into account the current best practice in this area) – is incorporated in chapters 7.2.3.2 and 7.4 PSR MO3&4. The quoted requirement of the ÚJD SR Decree No. 50/2006 Coll. is identical with the requirement in Annex 3 part B II. E. (2) (a) point 2 of the ÚJD SR Decree No. 430/2011 Coll. as amended by the Decree No. 103/2016,
- Condition No. 10 from the annex to the Decision (Relevant parts of chapter No. 9 of the Report to be completed with the requirements for coordination of record keeping of also other nuclear materials, such as fresh nuclear fuel and spent nuclear fuel) – is incorporated in chapter 9 of the PSR MO3&4,
- Condition No. 11 from the annex to the Decision (To harmonize classification of nuclear materials given in chapter 9.5.5 of the Report with the Regulation of the European Commission 302/2005, and to add a possibility of shipping nuclear materials from MBA produced in the nuclear facility of MO3&4) – is incorporated in chapter 9.5 of PSR MO3&4,
- Condition No. 22 from the annex to the Decision (Add to the relevant parts of the Report an internal flood analysis in the scope of the requirements of chapter 2.5.4.3 approved Quality Requirements for nuclear facilities of Units 3&4 of Mochovce NPP) – incorporated in chapters 7.2.3.1 and 6.10 of PSR MO3&4,
- Condition No. 23 from the annex to the Decision (Add to the relevant chapters of the Report an analysis of events associated with fires and floods that are triggered by a seismic event in accordance with the requirements of the IAEA Guide GS-G-4.1, 3.68 b) – incorporated in chap. 7.2.3.2 and 6.0 of PSR MO3&4,
- Condition No. 30 from the annex to the Decision (Add to relevant chapters of the Report a risk analysis for explosion or fire risks to determine the required fire resistance of fire-proof structures in accordance with the requirement stated in the

ÚJD SR Decree No. 50/2006 Coll., Annex 3, part B I. I. (5), and in accordance with the requirements of chapter 2.5.4.3 approved Quality Requirements for nuclear facilities of Units 3&4 of Mochovce NPP) – incorporated in chapter 7.2.3.1 of PSR MO3&4,

- Condition No. 31 from the annex to the Decision (Add to relevant chapters of the Report an analysis of a combination effects of phenomena caused by natural conditions and human activity in accordance with the requirement stated in the ÚJD SR Decree No. 50/2006 Coll., Annex 3, part B I. J. (2) (b) – incorporated in chap. 7.2.3.2 of PSR MO3&4. The quoted requirement of the ÚJD SR Decree No. 50/2006 Coll. is identical with the requirement of Annex 3, part B I. J. (2) (b) of the ÚJD SR Decree No. 430/2011 Coll. as amended by Decree No. 103/2016 Coll.

The Ministry of the Environment of the Slovak Republic (the “MŽP SR”) within the framework of the procedure and after assessing the written evaluation of fulfilment of the conditions specified in the Final Opinion No. 395/2010 – 3.4/hp Nuclear Power Plant Mochovce VVER 4x440 MW, project 3, issued by the Ministry of Environment (the “Final Opinion on EIA MO3&4”) pursuant to the Act No. 24/2006 Coll. on environmental impacts assessment and on amendments to certain laws (the “Act on impacts assessment”) issued its Binding Opinion No. 9704/2018-1.7/hp-Zs (the “Binding Opinion of MŽP SR”) of 22 October 2018, which was delivered to the Authority on 24 October 2018. In the binding opinion MŽP SR states that: “...The petition for the proceeding to issue:

- A. An authorization for management of nuclear materials in a nuclear facility pursuant to Section 5 par. 3 (g) of the Atomic Act, in the scope of handling and storage of fresh nuclear fuel in the fresh fuel node (the Administrative proceeding No. 1.1),
- B. Authorization for the commissioning of nuclear installation pursuant to Section 5 par. 3 (b) of the Atomic Act, in the scope of fresh fuel node, in the scope of storage and handling of fresh nuclear fuel in the building SO 800/1-02 Reactor Hall II. Main Generating Unit (the Administrative proceeding No. 1.2),
- C. Permit for an early use of the structure according to Section 83 of the Building Act, and according to Section 5 par. 3 (b) and Section 19 par. 3 of the Atomic Act for the fresh fuel node in the scope of storage and handling of fresh nuclear fuel in the object SO 800/1-02 Reactor Hall II. Main Generating Unit, in Room No. 407 Storage for fresh fuel (the Administrative proceeding No. 1.3),

Is conceptually in accordance with the Impacts Assessment Act, with the Final Opinion issued by MŽP SR No.: 395/2010-3.4/hp dated 28 April 2010 and its conditions.“

Pursuant to Section 7 par. (5) of the Atomic Act, a special condition for issuing an authorization under Section 5 par. (3) (g) of the Atomic Act the approval of the physical protection plan. The document: “Physical Protection Plan for MO3&4 UČP“, edition 1, revision 0, was approved by the Authority’s Decision No. 154/2018 of 24 May 2018. This document approved the technical, regime and organizational provision of physical protection in connection with commissioning of nuclear installation MO3&4, in the scope of handling and storage of fresh nuclear fuel in the fresh fuel node.

SE, a.s. has submitted to the Authority a report on implementation of the project for the installation of surveillance equipment of the International Atomic Energy Agency and the European Commission. The surveillance equipment will be installed, based on the request of the responsible staff of the IAEA and the European Commission, before commencing the commissioning of Unit 3.

Documentation supporting the decision for the administrative proceeding No. 1.1, 1.2 and 1.3 was published on the website of the Authority and the parties were informed about them in writing, letters reg. No. 4339/2018, 4531/2018 and 4526/2018. Two parties made statements on the supporting documentation for the decision: [REDACTED] on behalf of Global 2000, Friends of Earth Austria, Neustiftgasse 36, 1070 Wien (the “Global 2000”) and [REDACTED] on behalf of Wiener Umweltschutz, Muthgasse 62, 1190 Wien (the “Wiener Umweltschutz”). Both statements were delivered to the Authority by E-mail on 14 September 2018 within the time period set by the Authority.

Both statements (Global 2000, Wiener Umweltschutz) formulate questions /requirements referring to the document “Fulfilment of the EIA process requirements“, which was published on the website of the Authority as part of the supporting documentation for the decision concerning fresh fuel node. The document “Fulfilment of the EIA process requirements“ contains the account of meeting the conditions Nos. 3.1 to 3.35 of the Final Opinion on EIA for MO3&4.

The document “Fulfilment of the EIA process requirements“ is an account of the current fulfilment of requirements contained in the Final Opinion on EIA for MO3&4, which was elaborated as at 26 June 2018. It refers to the project of MO3&4 as a whole. Major part of the requirements from the Final Opinion on EIA for MO3&4 has no relationship or only very marginal relationship to the administrative procedure No. 1.1. The Authority evaluated the statements made by Global 2000 and Wiener Umweltschutz in accordance with Section 19 par. (2) of the Administrative Procedure Code.

Global 2000 states in its opinion the following:

- As to point 3.1 - Scenarios and documents are missing to explain whether changes have been implemented in accordance with the then valid decisions from 2008 (in the text, Global 2000 refers to the Authority’s Decision No. 266/2008), or others according to current claims. To this statement of Global 2000, the Authority, as the administrative body states that under point 3.1 of the document “Fulfilment of the EIA process requirements“ there is a confirmation of meeting the conditions contained in the Authority’s Decision Nos. 246/2008, 266/2008 and 267/2008. Modifications to the basic design, which the Authority approved by its Decision No. 266/2008, were part of the EIA process for the commissioning and operation of nuclear installation of MO3&4. Changes to the Preliminary Safety Report for Units 3&4 of MO3&4, approved by the Authority by its Decision No. 267/2008, were incorporated in the PSR MO3&4, which is in compliance with Annex 1 Part C (i) of the Atomic Act clarifying the Preliminary Safety Report. PpSR MO3&4 was made available to the public while removing sensitive information according to their definition in Section 3 para (16) and (17) of the Atomic Act from 16 March 2017 until 30 June 2017 in the leased premises in Mochovce. Changes in the PSR of MO3&4 that resulted from the comments made by the Authority, were in the scope of the fresh fuel node published as “Supporting documentation for the fresh fuel node decision (UČP)“ on the website of the Authority. The parties were informed about the supporting documentation in writing. For the fresh fuel node, the following modifications to the basic design were implemented (in addition to modifications that resulted from the Authority’s Decision No. 266/2008): modification of the escape routes from the building object – Main Generating Unit (placement of additional fire extinguishers in the fresh fuel node and removal of the wall hydrant), a change in the technical means of physical protection (this is classified information) and the possibility of changing the applied paint system. The author of the basic design confirmed full consistency of these

modifications with the concept of the basic design. The Authority accepted these changes to the basic design in writing. The fresh fuel node, its building part and equipment are fully compliant with the current applicable legislative requirements, including WENRA requirements and the IAEA documents. The binding opinion of MŽP SR No. 9704/2018-1.7/hp-Zs of 22 October 2018, which was delivered to the Authority on 24 October 2018 states the following: “The assessment of the project in question in accordance with Section 38 par. 4) of Act No. 24/2006 Coll. on environmental impacts assessment, and on amendments to certain laws as amended (the “Impact Assessment Act”) did not reveal any such facts that would have led to a reassessment of the project in question pursuant to Section 18 par. 1 and par. 2 of the Impact Assessment Act.”

- As to point 3.2 - Global 2000 has stated that as an NGO it has no access to the outcome of expert seminars in areas of common interest in nuclear safety with experts from Austria within the relevant bilateral Slovak-Austrian Agreement within the European Atomic Energy Community, Euratom, coordinated by ÚJD SR. ÚJD SR, as the administrative body states on the statement made by Global 2000: the document “Fulfilment of the EIA process requirements” confirming that the condition No. 3.2 from the Final Opinion on EIA for MO3&4 (“Continue in providing information and organizing expert seminars in the areas of common interest in nuclear safety with the experts from Austria within the relevant bilateral Slovak-Austrian Agreement within the European Atomic Energy Community, Euratom, coordinated by ÚJD SR...””) was fulfilled. This fact is also confirmed by the record from expert seminars, confirmed by the Austrian party. The meetings were attended by experts commissioned by the Austrian Government and also by representatives of government of the federal states. Given the fact that the subject of discussions was also sensitive information, the outputs from the seminars are not publicly available.

As to point 3.4 – Global 2000 stated that the MO3&4 power plant is not secured against the impact of an aircraft in accordance with the existing best practice. Statement by the Authority: the MO3&4 power plant is secured against the impact of a small aircraft by a separate construction design, as well as documentation describing the staff activity in case of occurrence of an initiation event – an impact of a small aircraft on the nuclear installation MO3&4. Addressing of a situation when the power plant is endangered by an aircraft, according to Section 12 par. 1 (e) of Act No. 575/2001 Coll. on the organization of government activities and organization of the central public administration as amended, is in the competence of the Ministry of Defence of SR, quote: “Ensuring the inviolability of the airspace of the Slovak Republic“. Further activity of Armed Forces concerning airspace disruption is stated under Section 4 of Act No. 321/2002 Coll. on armed forces of the Slovak Republic, as amended. The design documentation on securing the MO3&4 power plant against an impact of a small aircraft is subject to a regime, which is stipulated by Act No. 215/2004 Coll. on the protection of classified information and on amendments to certain laws, therefore it was not made available to the public.

- Global 2000 stated that the issue of the impact of the expected climate change (+2°C) on the flow of the Hron River and its water temperature is not sufficiently addressed. The Authority, as the administrative body states that the statement made by Global 2000 has no direct relation to the management of nuclear fuel in the fresh fuel node. However, in the submitted documentation by SE, a.s., (besides other PpSR MO3&4) it is stated that the nuclear power plant has a closed circuit of cooling system with cooling towers. Make-up water to the cooling circuits can be also secured from reserve sources due to their safety function. For this purpose, the power plant has established

procedures that have been tested on Mochovce Units 1&2 as part of the stress tests carried out after the accident in Fukushima NPP.

Wiener Umweltanwaltschaft commented on the fulfilment of the conditions of the Final Opinion on EIA MO3&4, which is contained in the document “Fulfilment of the EIA process requirements“. The Wiener Umweltanwaltschaft statement is directed at points 3.22, 3.26 and 3.28.

- As to point 3.22 it requests information about the tightness test for the tank scheduled for the second half of 2018, or whether it was already made. The requirement from the Final Opinion on EIA MO3&4 in point 3.22 is the following: “To ensure that within the proposed operation, such technical solutions are implemented to secure facilities, where hazardous substances are to be handled that will allow capturing hazardous substances that could be released during technical failure, or destruction, or would surface when extinguishing fire with water, and which are constructed in accordance with the requirements of the Slovak technical standards“. The method of fulfilment of the requirement 3.22 is given in “Fulfilment of the EIA process requirements“:
 - Storage of chemicals is provided in warehouses that are taken over by the contractors, and therefore they are responsible for the way and safety of storage.
 - MO3&4 conducts regular monthly inspections focusing on fire safety, safety at work and preventing occurrence of an accident related to the storage and handling of chemicals.
 - All chemical substances must be approved according to the internal document MO3&4/MNA - 190.03 Management of chemicals for the completion of Units 3&4, suppliers provide Safety Data Sheets for approval, product technical sheets, certificates and other documents, as needed.
 - In December 2013, tightness tests were carried out for all hold-up tanks in the warehouses and these are valid until 2018.

ÚJD SR has requested from SE, a.s., information on the tightness tests of all hold-up tanks in the warehouses. These tanks are located in the storage place for flammable materials and in the paint store. Currently valid MŽP SR Decree No. 200/2018 Coll. has changed the legislative requirements from July 2018, and this test is no longer required by the legislation, or is to be performed in other periods (10, or 20 years depending on the type of tank). The technical safeguarding of facilities, in which the hazardous substances are to be handled, is in compliance with the valid MŽP SR Decree No. 200/2018 Coll. Change in the legislative conditions for performing tightness tests of hold-up tanks occurred only after the publication of the document “Fulfilment of the EIA process requirements“ as part of the documentation used as a basis for the decision in the administrative proceedings Nos. 1.1, 1.2 and 1.3 on the website of the Authority.

- As to point 3.26 it requires information, whether the monitoring data are available to the public. The requirement from the Final Opinion on EIA for MO3&4 in par. 3.26 states: “Evaluate regularly all proposed monitoring activities. Results from monitoring to be regularly provided to the public administration authorities concerned and to the public.“ Statement of the Authority on this request from Wiener Umweltanwaltschaft: The monitoring data are available, for example, on the website of SE, a.s., access: “media“ → “publications“ → “Environmental Impact NPP Mochovce“ or “Environmental Impact NPP Mochovce - Units 3&4 under construction“ in the relevant month.
- As to point 3.28 it requires that dose limits are approved in the following process for MO3&4 not higher than for EMO1&2. The Authority states on this request: dose limits will be determined in the decision of the Public Health Authority of SR (the “ÚVZ SR“). The Authority expects that the decision of ÚVZ SR will be in line with the data

from the Report on Evaluation of the proposed activity for environmental impacts assessment (July 2009), which was the basis for the Final Opinion on the EIA MO3&4.

The submitted documentation for submission in the administrative proceeding No. 1.1 has been reviewed by the Authority in terms of fulfilment of legislative requirements laid down in the Atomic Act, ÚJD SR Decrees, as well as in the documents of the International Atomic Energy Agency (the "IAEA") and the Association of Nuclear Regulators of the EU states and of Switzerland (the "WENRA"):

1. ÚJD SR Decree No. 52/2006 Coll. on professional competence, as amended by Decree No. 34/2012 Coll..
2. ÚJD SR Decree No. 54/2006 Coll. on record keeping and control of nuclear materials and on notification of selected activities
3. ÚJD SR Decree No. 430/2011 Coll. on the requirements for nuclear safety as amended by the ÚJD SR Decree No. 103/2016 Coll.
4. ÚJD SR Decree No. 30/2012 Coll., laying down the details of the requirements for management of nuclear materials, radioactive waste and spent nuclear fuel as amended by the ÚJD SR Decree No. 101/2016 Coll.
5. ÚJD SR Decree No. 51/2006 laying down the details of the requirements for ensuring physical protection
6. Safety Guide, IAEA SSG-15 Storage of Spent Nuclear Fuel
7. Safety Guide, IAEA, NS-G-2.5 Core Management and Fuel Handling for Nuclear Power Plants
8. Safety Guide issued by the IAEA, NS-G-1.4 Design of Fuel Handling and Storage Systems for Nuclear Powerplants
9. WENRA requirements Report – Safety Reference Level for Existing Reactors, September 2014.

The requirements and recommendations of the IAEA and WENRA for the management and storage of fresh nuclear fuel in the nuclear facility are fully implemented in Slovak legislation, namely in the Atomic Act and the ÚJD SR Decrees, the exact identification of which is given above.

The administrative fee has not been levied because the administrative proceedings under the Atomic Act are not subject to a fee duty according to Act No. 145/1995 Coll. on administrative fees as amended.

On the basis of the above, the Authority has decided as set out in the operative part of this Decision.

Guidance

Under Section 61 (1) of the Administrative Procedure Code, appeal may be lodged against this Decision to the Nuclear Regulatory Authority of the Slovak Republic, Okružná 5, 918 64 Trnava, within 15 days from the date of delivery of this Decision. Appeal lodged within this time limit has a suspensive effect.

This Decision, after exhaustion of ordinary legal remedy, can be reviewed by the administrative court according to the provisions of the Administrative Judicial Code.

Trnava, 29 October 2018

Ing. Peter Uhrík
General Director of the Department of
Safety Evaluation and Inspection Activities

Annex: Binding Opinion of MŽP SR No. 9704/2018-1.7/hp-Zs of 22 October 2018