



On Approval of the Rules for Decommissioning of Nuclear and Radiation Facilities

Invalidated Unofficial translation

Decree of the Government of the Republic of Kazakhstan No. 287 of May 12, 2016. Abolished by the Decree of the Government of the Republic of Kazakhstan dated September 22, 2023 No. 830

Unofficial translation

Footnote. Abolished by the Decree of the Government of the Republic of Kazakhstan dated September 22, 2023 No. 830

Under sub-paragraph 4) of Article 5 of the Law of the Republic of Kazakhstan of January 12, 2016 “On the Use of Nuclear Energy”, the Government of the Republic of Kazakhstan **HEREBY DECREES AS FOLLOWS:**

1. That the attached Rules for Decommissioning of Nuclear and Radiation Facilities shall be approved.

2. That this Decree shall enter into force ten calendar days after the date of its first official publication.

*Prime Minister
of the Republic of Kazakhstan*

K. Massimov

Approved by
Decree of the Government
of the Republic of Kazakhstan
No. 287 of May 12, 2016

Rules for Decommissioning of Nuclear and Radiation Facilities

Chapter 1: General provisions

Footnote. The title of chapter 1 - as reworded by Decree of the Government of the RK No. 399 of 10.06.2021 (shall be enacted ten calendar days after the date of its first official publication).

1. These Rules for Decommissioning of Nuclear and Radiation Facilities (hereinafter referred to as the Rules) have been elaborated as provided for in sub-paragraph 4) of Article 5 of the Law of the Republic of Kazakhstan "On the Use of Nuclear Energy" dated January 12, 2016, and specify the procedure for decommissioning of nuclear and radiation facilities (hereinafter referred to as decommissioning).

2. The following terms and definitions shall apply herein:

1) the competent authority in the field of nuclear energy use (hereinafter referred to as the competent authority) - the central executive body responsible for managing the field of nuclear energy use;

2) operating organisation - a legal entity engaged in the management of nuclear energy facilities;

3) radiation installation - a special, non-nuclear installation, including its associated premises, facilities and equipment, where nuclear material and/or radioactive substances are handled;

4) nuclear installation means a facility, including premises, facilities and equipment, in which one or more of the following activities are undertaken: production, reprocessing, use, transportation, storage, disposal of nuclear material, except for installations for mining and/or processing of natural uranium or thorium.

Footnote. Paragraph 2 - as reworded by Decree of the Government of the RK No. 399 of 10.06.2021 (shall be put into effect ten calendar days after the date of its first official publication).

Chapter 2: Decommissioning of nuclear installations

Footnote. The title of Chapter 2 - as reworded by Decree of the Government of the RK No. 399 of 10.06.2021 (shall be enacted ten calendar days after the date of its first official publication).

3. The operating organisation shall develop a preliminary plan for decommissioning a nuclear installation (hereinafter referred to as the preliminary plan) in consultation with the competent authority at the design stage of a nuclear installation when preparing the pre-design documentation.

4. The preliminary plan shall be provided as part of the supporting documents accompanying the application for a licence to construct and operate a new nuclear facility. The preliminary plan shall describe and justify the financial instrument whereby the decommissioning will be financed.

5. The preliminary plan shall rely on the following decommissioning strategies:

1) decontamination and removal of all radioactive material from the site (immediate dismantling);

2) safe long-term storage and subsequent decontamination and dismantling (delayed dismantling);

3) sealing of the installation with subsequent restricted access to the site (on-site burial).

6. In selecting a preferred option for decommissioning strategy, consideration shall be given to:

1) the nuclear facility's specifications.

2) the findings of radiological and non-radiological risk assessments;

3) the findings of predictive assessment of the condition of buildings, structures in case of delayed dismantling;

4) the amount of radioactive waste accumulated and their treatment, storage and disposal;

5) the sufficiency of financial resources planned or available for the safe implementation of the chosen decommissioning method;

6) the personnel, in particular those operating the facility, proven methods, technology and equipment;

7) the experience from similar previous decommissioning projects;

8) the possible impact on the natural environment;

9) the socio-economic environment;

10) the sanitation requirements;

11) the plans for further development and use of the nuclear facility and the area adjacent to the site.

7. The preliminary plan shall outline the stages of decommissioning the nuclear facility, methods of dismantling major structures, estimated cost and timing of work, resources required, measures to ensure nuclear, radiation and nuclear safety, basic standards and specifications of the nuclear facility site after decommissioning.

8. When a nuclear installation is in operation, the preliminary plan shall be reviewed and updated periodically, but at least every 10 years, in the light of new technical and technological developments, changes in nuclear, radiation and nuclear safety requirements, costs of work and required resources.

9. When deciding to decommission a nuclear installation, the operating organisation shall prepare a final decommissioning plan (hereinafter referred to as the final plan) with due consideration of the technologies, techniques, economic indicators available at that time and the requirements of the legislation of the Republic of Kazakhstan in the field of the use of nuclear energy. The final decommissioning plan shall serve as the basis for designing and implementing the decommissioning of the nuclear installation.

10. The time frame for the final plan shall not exceed 60 years from the date of the decision to permanently shut down the nuclear installation.

11. The final plan for facilities with power or research reactors shall develop procedures for the transfer of nuclear material, spent fuel and nuclear material accountancy and control records to the organization responsible for its further long-term storage or reprocessing.

12. The decision to decommission an installation shall be made by the operating organisation itself at any stage of the lifecycle. In doing so, the operating organization

shall notify the competent authority of the decision made, the start date and the timing of the decommissioning work. The operator shall ensure that the decommissioning plan is fully implemented.

13. If amendments or refinements to the final plan are necessary during decommissioning, these shall be further agreed upon with the competent authority.

14. Decommissioning works shall be undertaken upon the basis of project documentation and the availability of a licence for the relevant activity. The project documentation shall envisage technical and organisational means and measures to ensure that personnel and public exposure, releases and discharges, environmental contamination by radioactive substances do not exceed the radiation safety limits and standards approved by the competent authority for sanitary and epidemiological well-being of the population.

15. The project documentation shall undergo state sanitary-epidemiological and ecological expertise.

16. The project documentation shall be exposed to nuclear safety and (or) radiation safety, and (or) nuclear security expertise. After obtaining a corresponding positive expert opinion, the design documentation shall be presented to the competent authority.

Footnote. Paragraph 16 - as reworded by Decree of the Government of the RK No. 399 of 10.06.2021 (shall be brought into force ten calendar days after the date of its first official publication).

17. The operator shall ensure the documentation of all decommissioning activities and the storage of the records. Decommissioning documentation and records shall include:

1) an inventory of radioactive waste with its origin, location, physical and chemical specifications, a record of its disposal or discharge from the facility;

2) site plans, engineering drawings, technical specifications and process descriptions;

3) data from quality assurance and quality control procedures and from operational activities;

4) safety and environmental impact assessment methods and the results of safety and environmental impact assessments;

5) identification of radioactive waste packaging;

6) the date of shutting down the installation for long-term storage, burial.

18. The decommissioning shall be documented by a report and a certificate of completion and exemption from state control, ensuring that the final condition of the nuclear installation and its site meets safety requirements.

19. Decision on early decommissioning of a nuclear installation shall be taken by the Government of the Republic of Kazakhstan as advised by the competent authority in case of violation of the requirements for safe operation of a nuclear installation,

which has led or could lead to a nuclear and (or) radiation accident and a reasonable inability of the operating organisation to ensure further safe operation of the nuclear installation.

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