

Nuclear Energy Act

(NEA)

of 21 March 2003

The Federal Assembly of the Swiss Confederation

on the basis of Article 90 of the Federal Constitution¹, and having considered the Federal Council dispatch of 28 February 2001²,

decrees:

Chapter 1: General Provisions

Article 1 Subject matter and purpose

The aim of this Act is to regulate the peaceful use of nuclear energy. Its main purpose is to protect human beings and the environment against the hazards of nuclear energy.

Article 2 Scope of application

¹ This Act applies to:

- a. nuclear goods;
- b. nuclear facilities;
- c. radioactive waste:
 1. that is generated in nuclear facilities, or
 2. that has been delivered in accordance with Article 27, paragraph 1 of the Radiation Protection Act³ of 22 March 1991 (StSG).

² The Federal Council may exclude the following from the scope of application of this Act:

- a. nuclear goods that do not serve the use of nuclear energy;
- b. nuclear facilities with low or harmless quantities of nuclear materials or radioactive waste;
- c. Nuclear goods and radioactive waste with low levels of radiation.

³ The provisions of the Radiation Protection Act shall apply insofar as this Act does not stipulate otherwise.

SR 732.1

- ¹ **SR 101**
- ² **BBl 2001 2665**
- ³ **SR 814.50**

Article 3 Terms and definitions

Definitions of terms used in this Act:

- a. *Monitoring period*: extended period of time over which a deep geological repository is monitored before it is closed and during which radioactive waste can be retrieved without undue effort;
- b. *Waste management*: conditioning, interim storage and final disposal of radioactive waste in a deep geological repository;
- c. *Deep geological repository*: a facility located deep underground, which may be closed, if the permanent protection of human beings and the environment through passive barriers is ensured;
- d. *Nuclear facility*: any installation or installations intended for the use of nuclear energy, the extraction, production, utilisation, processing or storage of nuclear materials, and the management of radioactive waste in accordance with Article 2, paragraph 1c;
- e. *Nuclear energy*: any form of energy that is released following the fission or fusion of atomic nuclei;
- f. *Nuclear materials*: substances that can be used for obtaining energy by means of nuclear fission processes;
- g. *Conditioning*: the entire range of operations by which radioactive waste is prepared for interim storage or final disposal, including mechanical reduction, decontamination, pressing, incineration, embedding in matrices, and packaging;
- h. *Nuclear goods*:
 - 1. Nuclear materials,
 - 2. Materials and equipment intended for or required for the use of nuclear energy,
 - 3. Technology that is required for developing, manufacturing and using goods cited in items 1 and 2;
- i. *Radioactive waste*: radioactive substances or contaminated materials that are no longer used;
- j. *Handling*: research, development, production, storage, transport, import, export, transit and mediation;
- k. *Mediation*:
 - 1. Provision of the essential requirements for concluding agreements on the delivery, purchase or forwarding of nuclear goods and radioactive waste, regardless of where the nuclear goods and radioactive waste may be located,
 - 2. Conclusion of such agreements if performance is the duty of a third party or parties,
 - 3. Trading in nuclear goods and radioactive waste with foreign countries from Swiss sovereign territory;

1. *Closure*: filling and sealing of all underground sections and the access shaft of a deep geological repository after expiry of the monitoring period;
- m. *Reprocessing*: cutting up of spent fuel elements, chemical dissolution of oxide fuel and separation into uranium, plutonium and fission products.

Chapter 2: Principles of Nuclear Safety

Article 4 Principles for the utilisation of nuclear energy

¹ In the utilisation of nuclear energy, human beings and the environment must be protected against harm due to ionising radiation. Only harmless quantities of radioactive substances may be released into the environment. Special care must be taken to prevent the release of impermissible quantities of radioactive substances and to protect human beings against impermissible levels of radiation during normal operation and malfunctions.

² Long-term impacts on genetic material must be taken into account.

³ In order to prevent harm to human beings and the environment, precautionary measures must be taken that:

- a. are required in accordance with experience and the status of scientific and technical knowledge;
- b. contribute towards an additional reduction of risk insofar as they are appropriate.

Article 5 Preventive and protective measures

¹ With regard to the design, construction and operation of nuclear facilities, preventive and protective measures must be taken in accordance with internationally recognised principles. These measures shall include the use of high-quality components, safety barriers, multiple and automated safety systems, the formation of a suitable organisational structure with qualified personnel, and the fostering of a strong safety culture.

² Emergency protection measures must be ready for immediate implementation to limit the extent of damage in the event that dangerous quantities of radioactive substances should be released into the environment.

³ Security measures must be taken in order to prevent any interference with the safety of nuclear facilities and nuclear materials through unauthorised acts or the theft of nuclear materials. If required, such measures shall be classified.

⁴ The Federal Council shall stipulate which preventive and protective measures are required.

Chapter 3: Nuclear Goods

Article 6 Licensing obligation

¹ Anyone who handles nuclear materials is obliged to obtain a licence from the authority designated by the Federal Council.

² The Federal Council may impose a licensing obligation for:

- a. handling or using any materials or equipment intended for, or required for the utilisation of nuclear energy;
- b. the export or mediation of technology in accordance with Article 3h, section 3.

³ Licences shall be valid for a limited period only.

⁴ The Federal Council shall regulate the licensing procedure.

Article 7 Conditions governing the issue of licences

A licence may be issued if the following conditions are met:

- a. the protection of human beings and the environment is assured, and nuclear safety and security are guaranteed;
- b. there are no conflicting reasons associated with non-proliferation of nuclear arms, in particular international control measures that are not binding under international law but are supported by Switzerland;
- c. no sanctions have been imposed under the Embargo Act of 22 March 2002⁴;
- d. the required insurance cover exists in accordance with the Nuclear Energy Liability Act of 18 March 1983⁵;
- e. there are no conflicting commitments under international law, and Switzerland's external security is not affected;
- f. the persons responsible for the facility concerned possess the necessary expertise.

Article 8 Measures in special cases, measures against specific countries, exemptions from the licensing obligation

¹ In special cases, the Federal Council or its designated authority may prohibit the import, export, transit and mediation of nuclear materials, or attach certain conditions thereto, regardless of whether a licensing obligation may exist, if such measures are required in the interests of the non-proliferation of nuclear arms.

² For the purpose of implementing international treaties, the Federal Council may rule that no licences are to be issued for certain countries or for a specified group of countries.

⁴ SR 946.231

⁵ SR 732.44

³ The Federal Council may grant exemption from, or the easing of, licensing obligations, especially for deliveries to countries that are contractual parties to international treaties on the non-proliferation of nuclear arms or which participate in control measures supported by Switzerland.

Article 9 Export for reprocessing

A licence may be issued for the export of spent fuel elements for reprocessing purposes if the following conditions are met in addition to those cited in Article 7 above:

- a. the country of destination has formally consented to the import of spent fuel elements for reprocessing purposes in a treaty signed under international law, and Switzerland and the country concerned have formally agreed on the terms governing the return of the resulting waste material;
- b. the country of destination has a suitable reprocessing plant at its disposal that fulfils the latest international standards in science and technology;
- c. all countries concerned have given their consent to the transit of the spent fuel elements;
- d. the exporter has entered into a binding agreement with the recipient of the spent fuel elements that has been approved by the Federal Council or its designated authority, according to which the exporter undertakes to accept any waste matter that may result from reprocessing, and, if applicable, the return of any spent fuel elements that may not have been reprocessed;
- e. the country of destination has ratified the relevant international treaties concerning the safety of nuclear facilities and the handling of spent fuel elements and radioactive waste;
- f. reprocessing is monitored by an international organisation;
- g. agreements have been concluded governing the utilisation of the entire quantity of separated plutonium resulting from the reprocessing of mixed-oxide fuel elements.

Article 10 Transport by air of nuclear materials that contain plutonium

Nuclear materials that contain plutonium may not be transported within Swiss airspace.

Article 11 Reporting and accounting obligations

¹ Licence holders are obliged to notify the supervisory authorities without delay in the event of special activities and occurrences relating to the handling of nuclear materials which could interfere with nuclear safety or security. The Federal Council shall specify the activities and events concerned.

² The Federal Council may impose a reporting obligation for the possession of nuclear materials.

³ Owners of nuclear materials are obliged to monitor their inventories, maintain detailed accounts thereof, and report on them to the relevant supervisory authorities on a periodical basis. These obligations shall also apply to any nuclear materials they may own that is kept abroad.

Chapter 4: Nuclear Facilities

Section 1: General Licence

Article 12 Licensing obligation

¹ Anyone intending to construct or operate a nuclear facility requires a general licence issued by the Federal Council.

² No legal entitlement exists with respect to the granting of a general licence.

³ Nuclear facilities with a low hazard potential do not require a general licence. The Federal Council shall specify which facilities this ruling concerns.

Article 13 Conditions governing the granting of a general licence

¹ A general licence may be granted if the following conditions are met:

- a. the protection of human beings and the environment can be ensured;
- b. the granting of the licence does not conflict with any other provisions of federal legislation, in particular legislation governing environmental protection, preservation of local natural and cultural heritage, and spatial planning;
- c. a plan has been submitted for decommissioning, or for the monitoring period and the closure of the facility;
- d. evidence has been provided for the management of resulting radioactive waste;
- e. Switzerland's external security is not affected;
- f. there are no conflicts with commitments under international law;
- g. with regard to deep geological repositories, the results of geological investigations confirm the suitability of the site.

² A general licence may be granted to a company limited by shares, co-operative or public law entity. If the applicant is a foreign company, it must have a branch registered in the commercial register in Switzerland. The Federal Council may refuse to grant a general licence to a company formed in accordance with the laws of a foreign country if the country in which the company concerned is domiciled does not grant reciprocal rights, insofar as the decision of the Federal Council does not conflict with any existing international commitments.

Article 14 Content of the general licence

¹ The general licence shall specify:

- a. the name of the licence holder;
- b. the location of the facility;
- c. the purpose of the facility;
- d. a brief outline of the project;
- e. the maximum permissible exposure to radiation for people in the vicinity of the facility;
- f. and with regard to deep geological repositories:
 1. criteria which, if not fully met, lead to the exclusion of a planned disposal zone due to lack of suitability,
 2. a provisional protection zone.

² A brief outline of the project shall include descriptions of the approximate size and location of the main buildings constituting the facility and the following:

- a. with regard to nuclear reactors: the reactor system, output category, and main cooling system,
- b. with regard to storage or disposal facilities for nuclear materials or radioactive waste: the category of goods and maximum capacity.

³ The Federal Council shall specify a deadline for the submission of an application for a construction licence, and may extend this deadline in certain circumstances.

Section 2: Construction**Article 15** Licensing obligation

Anyone intending to construct a nuclear facility requires a construction licence from the Federal Department of Environment, Transport, Energy and Communications (the Department).

Article 16 Conditions governing the granting of a construction licence

¹ A construction licence is granted if the following conditions are met:

- a. the protection of human beings and the environment is ensured;
- b. the project meets the principles governing nuclear safety and security;
- c. the granting of the licence does not conflict with any other provisions of federal legislation, in particular governing environmental protection, preservation of local natural and cultural heritage, and spatial planning;
- d. the applicant is able to guarantee professional project management and has drawn up a programme of measures relating to quality assurance for all construction activities;

- e. a plan has been submitted for decommissioning, or a project for the monitoring period and a plan for the closure of the facility.

² For facilities that require a general licence, a construction licence will only be granted if:

- a. the applicant is in possession of a legally valid general licence;
- b. the project concerned complies with the provisions of the general licence.

³ For facilities that are not subject to a general licence, the requirements cited in Article 13, paragraph 1d-f and paragraph 2 also apply.

Article 17 Content of the construction licence

¹ The construction licence shall specify:

- a. the name of the licence holder;
- b. the site of the facility;
- c. the planned reactor output or capacity of facility;
- d. the main elements of technical implementation;
- e. a brief outline of emergency protection measures;
- f. a list identifying all buildings, structures and components of the facility that may only be constructed or installed after a clearance has been issued by the relevant supervisory authority.

² The Department shall specify a deadline for the commencement of construction work. It may extend this deadline in certain justified cases.

Article 18 Execution of project

The licence holder is obliged to keep a complete set of documents concerning technical installations, inspections and tests.

Section 3: Operation

Article 19 Licensing obligation

Anyone intending to operate a nuclear facility requires an operating licence granted by the Department.

Article 20 Conditions governing the granting of an operating licence

¹ An operating licence is granted if the following conditions are met:

- a. the applicant is the owner of the nuclear facility in question;
- b. all provisions pertaining to the general licence and construction licence have been met;

- c. protection of human beings and the environment is ensured;
- d. the facility and planned type of operation meet the relevant nuclear safety and security requirements;
- e. the requirements on personnel and organisation can be met;
- f. appropriate measures have been prepared to secure quality assurance for all activities to be carried out;
- g. appropriate measures for dealing with emergencies have been prepared;
- h. the prescribed insurance cover exists in accordance with the Nuclear Energy Liability Act of 18 March 1983⁶.

² The operating licence may be granted at the same time as the construction licence if the requirements for safe operation can be assessed conclusively at the time of application.

³ The owner of a nuclear reactor may store nuclear materials in his facility before an operating licence has been granted, as long as he obtains a licence for this purpose from the Department. Articles 20 to 24 shall apply analogously to this licence.

Article 21 Content of the operating licence

¹ The operating licence shall specify:

- a. the name of the licence holder;
- b. the permitted reactor output or capacity of the facility;
- c. the limits for release of radioactive substances into the environment;
- d. the measures for monitoring the surroundings;
- e. the safety, security, and emergency measures to be taken by the licence holder during operation of the facility;
- f. the levels of start-up that require a clearance from the relevant supervisory authority prior to commencement of operation of the facility.

² The validity of an operating licence may be limited to a specific period.

Article 22 General obligations on the part of the licence holder

¹ The licence holder is responsible for the safety of the facility and its operation.

² In this connection he shall:

- a. always give the necessary priority to nuclear safety during operation of the facility, i.e. comply with all specified operating limits and conditions;
- b. establish a suitable organisational structure and employ an adequate number of appropriately qualified personnel; the Federal Council shall specify minimum requirements and regulate the training of specialised staff;
- c. take measures to ensure that the facility is kept in good condition;

⁶ SR 732.44

- d. carry out follow-up inspections and systematic safety and security evaluations throughout the entire service life of the facility;
- e. in the case of nuclear power plants, carry out a comprehensive safety review at regular intervals;
- f. periodically report to the relevant supervisory authorities about the condition and operation of the facility, and notify them without delay about any incidents that may occur;
- g. upgrade the facility to the extent that it is in keeping with operational experience and the current state of backfitting technology, and beyond insofar as further upgrading is appropriate and results in a further reduction of risk to human beings and the environment;
- h. monitor scientific and technological developments, and compare operating experience and findings with those of other facilities of a similar nature;
- i. keep records on all technical installations and on the operation of the facility, and amend the safety and security reports as necessary;
- j. carry out appropriate measures to secure quality assurance for all activities conducted within the facility;
- k. keep the decommissioning plan or the project for the monitoring period and the plan for the closure of the facility up to date.

³ The Federal Council shall specify the criteria according to which the licence holder must temporarily shut down and upgrade the facility.

Article 23 Security guards

¹ The Department is authorised to require licence holders to maintain a corps of armed security guards to protect nuclear facilities against unlawful access or interference.

² The Federal Council shall regulate the requirements placed on the security guards and shall specify the duties and authority of the personnel after consultation with the relevant cantonal authorities.

³ The canton in which the facility is located shall regulate the training of the security guards in collaboration with the relevant federal authority.

Article 24 Reliability assessments

¹ Persons appointed to positions that are essential for nuclear safety and security shall regularly undergo reliability assessments.

² These assessments may involve the processing of particularly sensitive personal data concerning the health and mental suitability of the subject concerned, together with data regarding his or her lifestyle and habits that may be of relevance to security, and all information may be stored in a database.

³ Data may be passed on to the owner of the facility and to the relevant supervisory authority.

⁴ The Federal Council shall determine which persons shall be subject to reliability assessments and shall also regulate the assessment procedure. It shall specify the authority that is to carry out reliability assessments, process the related data and maintain the associated database.

Article 25 Measures in extraordinary situations

The Federal Council may order the precautionary shutdown of nuclear power plants in extraordinary situations.

Section 4: Decommissioning

Article 26 Decommissioning obligations

¹ The owner of a nuclear facility is obliged to decommission the facility if:

- a. it has been definitively taken out of operation;
- b. the operating licence has not been granted or has been withdrawn or has expired in accordance with Article 68, paragraphs 1a or b, and the Department has ordered the facility to be decommissioned.

² In this connection the owner is obliged:

- a. to meet all requirements relating to nuclear safety and security;
- b. to transfer all nuclear materials to another nuclear facility;
- c. to decontaminate radioactive components or treat them as radioactive waste;
- d. to properly manage radioactive waste;
- e. to maintain surveillance of the facility until such time as all sources of nuclear hazards have been removed.

Article 27 Decommissioning project

¹ The owner of a nuclear facility is required to submit a project to the relevant supervisory authorities outlining the plans for its decommissioning. The supervisory authority concerned shall specify a deadline for this purpose.

² The project shall describe:

- a. the various stages and overall timetable;
- b. each step in the process of dismantling and demolition;
- c. protective measures;
- d. personnel requirements and organisation;
- e. the management of radioactive waste;
- f. overall costs, measures taken by the operator to secure the necessary financing.

Article 28 Decommissioning order

The Department orders the decommissioning of nuclear facilities and specifies which tasks require a clearance to be obtained from the supervisory authorities.

Article 29 Completion of decommissioning

¹ After the decommissioning activities have been completed in accordance with the applicable regulations, the Department shall verify that the facility no longer represents a radiological hazard and is thus no longer subject to the provisions of nuclear energy legislation.

² The company that was ordered to decommission the nuclear facility may only be liquidated with the prior consent of the Department.

Chapter 5: Radioactive Waste**Section 1: General Provisions****Article 30** Principles

¹ Radioactive substances shall be handled in such a manner as to ensure that as little radioactive waste as possible is produced.

² All radioactive waste produced in Switzerland shall, as a general rule, be managed in Switzerland.

³ Radioactive waste shall be managed in such a manner as to ensure the permanent protection of human beings and the environment.

Article 31 Obligation to manage radioactive waste

¹ Anyone who operates or decommissions a nuclear facility is obliged to manage all radioactive waste arising from that facility at his own cost. The obligation to manage radioactive waste shall encompass the necessary preliminary activities such as research and geological investigations, as well as the timely provision of a deep geological repository.

² The obligation to manage radioactive waste is met if:

- a. The radioactive waste has been transferred to a deep geological repository and the funds required for the monitoring period and the eventual closure have been secured;
- b. The radioactive waste has been transferred to a management facility abroad.

³ If a general licence for a nuclear power plant has been transferred to another licence holder (Article 66, paragraph 2), the previous and the new licence holder shall be responsible for the management of all radioactive waste and spent fuel produced up to the time of transfer of the licence.

⁴ The company responsible for the management of radioactive waste may only be liquidated with the prior consent of the Department.

Article 32 Waste management programme

¹ The persons responsible for the management of radioactive waste shall draw up a waste management programme, which shall include a financial plan up to the time at which the nuclear facilities will be taken out of operation. The Federal Council shall specify a deadline by which the waste management programme is to be submitted.

² The waste management programme shall be reviewed by an authority designated by the Federal Council, after which it shall be forwarded by the Department to the Federal Council for approval.

³ The authority designated by the Federal Council shall monitor compliance with the programme after it has been approved.

⁴ The persons responsible for the management of radioactive waste are obliged to periodically adapt the programme to changing circumstances.

⁵ The Federal Council shall provide regular reports on the programme to the Federal Assembly.

Article 33 Waste management by the Confederation

¹ The Confederation shall be responsible for the management of:

- a. radioactive waste that has been delivered in accordance with Article 27, paragraph 1 of the Radiation Protection Act⁷;
- b. other radioactive waste at the expense of the Disposal Fund, if the persons responsible for the management of radioactive waste should fail to fulfil their obligation.

² For this purpose, the Confederation may:

- a. participate in geological investigations or carry out such investigations itself;
- b. participate in the construction and operation of a waste management facility or construct and operate such a facility itself.

Article 34 Handling radioactive waste

¹ Articles 6 to 11 shall apply analogously with regard to the handling of radioactive waste outside nuclear facilities.

² A licence for the import of radioactive waste from nuclear facilities that has not been produced in Switzerland, but is to be managed here, may be granted by way of exception if the following conditions are met in addition to those cited in Article 7 above:

- a. Switzerland has consented to the import of radioactive waste for management purposes in an agreement under international law;
- b. Switzerland has a suitable waste management facility that fulfils the latest international standards of science and technology;

⁷ SR 814.50

- c. all countries concerned have given their consent to the transit of the radioactive waste in question;
- d. the importer and the exporter of the radioactive waste consignment have signed a legally binding agreement that has been approved by the country of origin and stipulates that the exporter shall accept the consignment if it has to be returned for any reason.

³ A licence may be granted for the export of radioactive waste for conditioning if the following conditions are met in addition to those cited in Article 7 above:

- a. the country of destination has consented to the import of radioactive waste for conditioning purposes in an agreement under international law;
- b. the country of destination has a suitable waste management facility that fulfils the latest international standards of science and technology;
- c. all countries concerned have given their consent to the transit of the radioactive waste in question;
- d. the exporter has entered into a binding agreement with the importer of the radioactive waste that has been approved by the Federal Council or its designated authority and which stipulates that the exporter shall take back any radioactive waste that may result from conditioning or – if applicable – any radioactive waste that may not have been conditioned.

⁴ A licence for the export of radioactive waste for storage or disposal may be granted by way of exception if the conditions cited in section 3 lit. a-c above are met, and if the exporter has entered into a binding agreement with the importer of the radioactive waste that has been approved by the authority designated by the Federal Council, and which stipulates that the exporter shall take back the consignment if necessary.

Section 2: Geological Investigations

Article 35 Licensing obligation and conditions

¹ Geological investigations to be carried out in order to closely examine potential sites for a deep geological repository require a licence from the Department.

² The licence is granted if the following conditions are met:

- a. the planned investigations are suitable for providing the necessary basis for subsequent evaluation of the safety of a deep geological repository without affecting the suitability of the site;
- b. the granting of the licence does not conflict with any other provisions of federal legislation, in particular legislation governing environmental protection, nature conservation, protection of natural and cultural landscapes, and spatial planning.

³ The Federal Council may waive the licensing obligation in the case of investigations that have very little impact on the immediate surroundings.

Article 36 Content of the licence for geological investigations

¹ The licence specifies:

- a. the main aspects of the investigations, including in particular the approximate location and extent of drilling and underground structures;
- b. the investigations that may only be carried out after a clearance has been obtained from the relevant supervisory authorities;
- c. the scope of geological documentation.

² The licence shall be valid for a limited period only.

Section 3: Special Provisions for Deep Geological Repositories**Article 37** Operating licence

¹ An operating licence for a deep geological repository is granted if the following conditions are met in addition to those cited in Article 20, paragraph 1:

- a. the findings obtained during construction confirm the suitability of the site;
- b. it is possible to retrieve the radioactive waste without undue effort until closure of the repository.

² The operating licence shall specify the definitive protection zone for the deep geological repository.

³ It shall specify certain requirements, in particular activity limits for the waste to be stored. The emplacement of each type of waste requires a clearance to be obtained beforehand from the relevant supervisory authorities.

Article 38 Special obligations on the part of an operating licence holder for a deep geological repository

¹ The Federal Council may oblige the holder of an operating licence for a deep geological repository to take radioactive waste originating from Switzerland against payment of sufficient remuneration to cover costs, as long as the waste concerned meets the requirements cited in the operating licence.

² The licence holder is obliged to keep complete records of all findings obtained up to the end of the monitoring period and of relevance to safety, together with plans of the deep geological repository and an inventory of radioactive waste stored therein.

³ For as long as the deep geological repository remains subject to nuclear energy legislation, the operating company may only be liquidated with the prior consent of the Department.

Article 39 Monitoring period and closure

¹ The owner of a deep geological repository is obliged to submit an updated project for the monitoring period and a project for the eventual closure if:

- a. the emplacement of radioactive waste has been completed;
- b. the operating licence has been withdrawn or has expired in accordance with Article 68, paragraphs 1a or b, and the Department has ruled that a project must be submitted.

² Upon expiry of the monitoring period, the Federal Council shall order the closure of the repository, if the permanent protection of human beings and the environment is ensured.

³ After the repository has been closed in accordance with the applicable regulations, the Federal Council may stipulate that it must be monitored for a further limited period of time.

⁴ After the repository has been closed in accordance with the applicable regulations, or upon expiry of the additional monitoring period, the Federal Council shall declare that the disposal facility is no longer subject to the provisions of nuclear energy legislation. The Confederation may implement further-reaching measures, in particular environmental monitoring.

Article 40 Protection of a deep geological repository

¹ The protection zone is the underground area in which intervention could interfere with the safety of the repository. The Federal Council shall specify the criteria for the protection zone.

² Anyone intending to carry out deep drilling, construct shafts, carry out explosions or other activities that affect a designated protection zone is required to apply to an authority designated by the Federal Council for a licence.

³ The authority designated by the Federal Council shall enter a provisional registration of the protection zone with the relevant land registry following the issue of a general licence and a definitive entry following the issue of an operating licence. The cantonal authorities shall enter into the land register those plots of land affected by the designation of a protection zone not recorded in the land register. Plots of land for which no official survey has been carried out, shall be duly surveyed (initial or repeat survey). The Federal Council shall regulate this procedure.

⁴ The cantonal authorities are responsible for ensuring that the protection zone is registered in the structure and land use plan.

⁵ In the event that the repository should not be constructed or put into operation, the authority designated by the Federal Council shall revoke the provisional protection zone and request the relevant land registry to delete the entry from the land register. The cantonal authorities are responsible for ensuring that the structure and land use plan are amended accordingly.

⁶ The Federal Council is responsible for ensuring that all records concerning the repository, the waste matter stored therein and the designated protection zone are duly preserved and that associated findings are retained in a suitable manner. It may pass on corresponding data to other countries or international organisations.

⁷ The Federal Council stipulates that the repository be permanently marked.

Article 41 Submission and use of geological data

¹ Basic data and findings obtained from geological investigations and during the construction of a deep geological repository shall be submitted to the Confederation upon its request free of charge.

² The Federal Council shall regulate access to and use of these data, and in so doing shall safeguard the interests of the owners of the data.

Chapter 6: Procedures and Supervision**Section 1: General Licence****Article 42** Application procedure

Applications for a general licence must be submitted to the Swiss Federal Office of Energy (SFOE), together with all necessary documentation. The SFOE then examines the application and requests any further information that may be required.

Article 43 Expert reports and advisory opinions

¹ The SFOE obtains the necessary expert reports on the following aspects:

- a. protection of human beings and the environment;
- b. disposal of radioactive waste.

² It then requests the cantonal authorities and relevant government bodies to comment on the application and expert reports within three months. Other deadlines may apply for the associated environmental impact report. The SFOE may extend the deadline if the situation requires.

³ The evaluation procedure within the federal administration is based on the provisions of Article 62b of the Federal Act on the Organisation of the Government and the Administration of 21 March 1997⁸.

Article 44 Involvement of the canton in which the facility is to be located

The Department shall involve the canton in which the facility is to be located as well as the cantons and countries whose borders lie in the immediate vicinity of the planned location before making a decision on the general licence. The concerns of the canton in which the facility is to be located as well as those of the cantons and countries whose borders lie in the immediate vicinity must be taken into account provided this does not place unreasonable limitations on the project.

⁸ SR 172.010

Article 45 Publication and public inspection

¹ The application and advisory opinions of the cantons and relevant authorities, as well as all associated expert reports, shall be made available for public inspection for a period of three months.

² Notice of the public inspection shall be published in the official gazette of each canton and commune concerned, as well as in the Swiss Federal Gazette.

Article 46 Objections and appeals

¹ Well-founded objections to the granting of a general licence must be submitted in writing to the SFOE within three months of publication. The Federal Council may extend the deadline by a maximum of three months upon receipt of a justified application. There are no costs associated with objections, nor is there any entitlement to compensation of parties.

² Anyone classified as party in accordance with the provisions of the Federal Administrative Procedures Act of 20 December 1968⁹ may lodge an appeal with the SFOE within three months of publication. Communes may seek to safeguard their interests by lodging an appeal. Otherwise the provisions of the Federal Administrative Procedures Act shall apply.

³ Parties resident abroad must provide an address in Switzerland for notification purposes. Failure to do so may result in non-notification or non-publication in the Swiss Federal Gazette.

Article 47 Advisory opinions on objections and appeals

¹ The SFOE shall invite cantonal authorities, specialised institutions and recognised experts to submit advisory opinions on objections and appeals for the attention of the Federal Council.

² The settlement of differences within the federal administration is based on the provisions of Article 62b of the Federal Act of 21 March 1997¹⁰ on the Organisation of the Government and the Administration.

Article 48 Ruling on applications

¹ The Federal Council shall be responsible for ruling on all applications, objections and appeals.

² It shall submit its rulings to the Federal Assembly for approval.

³ If the Federal Council should decide not to grant a general licence, and the Federal Assembly fails to approve this ruling, the Federal Assembly shall instruct the Federal Council to grant the general licence together with any conditions that the Federal Assembly may have attached to it, and to re-submit its decision to the Federal Assembly for approval.

⁹ SR 172.021

¹⁰ SR 172.010

⁴ Resolutions by the Federal Assembly concerning the approval of general licences are subject to optional referendum.

Section 2: Construction Licences for Nuclear Facilities and Licences for Geological Investigations

Article 49 General provisions

¹ The procedures governing construction licences for nuclear facilities and licences for geological investigations are based on the provisions of this Act, the Federal Administrative Procedures Act¹¹ and the Compulsory Purchase Act of 20 June 1930¹².

² The granting of a licence encompasses all requirements in accordance with federal legislation.

³ Cantonal licences and plans are not required. Cantonal legislation must be taken into account, insofar as this does not unduly compromise the project.

⁴ The Department shall consult the canton in which the facility is located before it grants a licence. If the canton should reject the application, but the Department nonetheless issues the licence, the canton shall be entitled to lodge an appeal.

⁵ A nuclear facility also encompasses all exploitation and installation sites associated with its construction and operation. Geological investigations and deep geological repositories also include directly related sites for the utilisation or storage of excavated, extracted and demolition material.

Article 50 Application procedure

Applications must be submitted to the SFOE, together with all necessary documentation. The SFOE then examines the application and requests any further information that may be required.

Article 51 Compulsory purchase rights

For the applicant, compulsory purchase rights apply as follows:

- a. for the construction, operation and decommissioning of a nuclear facility for which a general licence is required;
- b. for geological studies that require a licence;
- c. for the construction of exploitation and installation sites that are directly associated with projects in accordance with a and b;
- d. for directly related sites for the utilisation or storage of excavated, extracted and demolition material.

¹¹ SR 172.021

¹² SR 711

Article 52 Marking boundaries and erecting profile frames

¹ Before the application is made available for public inspection, the applicant must make the changes that the planned facility or planned geological studies will have on the site and its surroundings clearly visible by marking the boundaries and, in the case of buildings, erecting profile frames.

² Any objections to the marked boundaries or erected profiles must be submitted to the SFOE immediately, or in any case no later than the expiry of the inspection deadline.

Article 53 Consultation, publication and public inspection

¹ After receiving an application, the SFOE shall forward it to the cantonal authorities and request them to submit an advisory opinion within three months. The SFOE may extend the deadline in certain justified circumstances.

² The application shall be published in the official gazette of each canton and commune concerned, as well as in the Swiss Federal Gazette, and made available for public inspection for a period of 30 days.

³ Upon publication of the notice of public inspection, the compulsory purchase order in accordance with Articles 42 to 44 of the Compulsory Purchase Act¹³, is deemed to have been served.

Article 54 Personal notification

In accordance with Article 31 of the Compulsory Purchase Act¹⁴, the applicant shall personally notify the person or persons entitled to compensation of the rights subject to compulsory purchase, no later than the notice of public inspection of the application.

Article 55 Appeals

¹ Anyone deemed to be party in accordance with the provisions of the Federal Administrative Procedures Act¹⁵ or Compulsory Purchase Act¹⁶ of 1968 may lodge an appeal with the SFOE during the public notification period. Persons who do not lodge an appeal are excluded from any future proceedings.

² Likewise, all appeals against compulsory purchase and any claims for compensation or payment in kind must be lodged within the public inspection period. Any subsequent appeals and claims may be lodged with the SFOE in accordance with Articles 39-41 of the Compulsory Purchase Act.

³ The communes concerned may seek to safeguard their interests by lodging an appeal.

⁴ Article 46, paragraph 3 shall apply with regard to parties resident abroad.

¹³ SR 711

¹⁴ SR 711

¹⁵ SR 172.021

¹⁶ SR 711

Article 56 Evaluation procedure within the federal administration

The evaluation procedure within the federal administration is based on the provisions of Article 62*b* of the Federal Act on the Organisation of the Government and the Administration of 21 March 1997¹⁷.

Article 57 Ruling on appeals

When it grants the necessary licence, the Department simultaneously rules on all claims and appeals associated with compulsory purchase rights.

Article 58 Assessment procedure, premature occupancy

¹ After the licensing procedure has been concluded, an assessment procedure shall be carried out before the Compulsory Purchase Tribunal (insofar as this may be necessary), in accordance with the provisions of the Compulsory Purchase Act¹⁸. The Compulsory Purchase Tribunal may only deal with claims that have already been lodged, subject to the provisions of Article 38 of the Compulsory Purchase Act.

2 The SFOE shall submit all approved plans, the compulsory purchase plan, the land acquisition table and the lodged claims to the Chairman of the Compulsory Purchase Tribunal.

3 The Chairman of the Compulsory Purchase Tribunal may approve premature occupancy on the basis of an enforceable licence ruling. For this purpose it shall be assumed that the expropriator would suffer significant disadvantages if premature occupancy were to be denied. Otherwise the provisions of Article 76 of the Compulsory Purchase Act shall apply.

Article 59 Claims associated with compulsory purchase rights based on the protection zone

¹ In the event that any restrictions on the use of property should arise in association with the definition of the protection zone that would be equivalent to compulsory purchase, these shall be compensated in full. The circumstances at the time at which the property restrictions came into effect shall apply for the purpose of assessing the amount of compensation to be paid.

² It is the owner of the deep geological repository who shall be obliged to pay compensation.

³ The party affected by the property restriction shall lodge his claims with the owner of the repository in writing within five years following definitive registration in accordance with Article 40, paragraph 3. In the event that any claims should be contested in full or in part, settlement shall be made in accordance with the provisions of Articles 57–75 of the Compulsory Purchase Act¹⁹.

¹⁷ SR 172.010

¹⁸ SR 711

¹⁹ SR 711

⁴ Only claims already lodged may be dealt with in this procedure. Appeals and claims relating to property restrictions lodged at a later date shall be excluded.

⁵ Compensation shall become interest-bearing with effect from the date on which the property restrictions came into effect.

Article 60 Involvement of the cantons in the disposal of excavated, extracted and demolition material

¹ In the event that geological investigations and the construction of a deep geological repository should result in significant volumes of excavated, extracted or demolition material that cannot be used or stored in the immediate vicinity of the site, the authorities of the canton concerned shall designate sites necessary for the disposal of that material .

² In the event that the canton concerned has not granted a licence, or that the licence issued has not entered into force at the time the construction licence for carrying out geological investigations is granted , the Department may designate an interim storage site and attach conditions and requirements governing its utilisation. The provisions governing procedures as specified in this section shall apply. The canton concerned shall designate sites for the disposal of the material within a period of five years.

**Section 3: Operating Licence for Nuclear Facilities,
Decommissioning of Nuclear Facilities and Closure of
Deep Geological Repositories**

Article 61 Operating licence for nuclear facilities

The procedure for obtaining an operating licence for a nuclear facility is regulated in Article 49, paragraphs 1–4, Article 50, Article 51 and Articles 53–59.

Article 62 Decommissioning of nuclear facilities

The procedure for decommissioning nuclear facilities is regulated in Article 49, paragraphs 1-4 and Articles 50-58 and 60.

Article 63 Closure of a deep geological repository

The procedure for the closure of a deep geological repository is regulated in Article 49, paragraphs 1-4 and Articles 50, 53 and 55.

Section 4: Other rulings, including clearances

Article 64

¹ For rulings in accordance with this Act other than those governed by sections 1 to 3 of this chapter, the provisions of the Federal Administrative Procedures Act²⁰ shall apply.

² Article 46, paragraph 3 shall apply with respect to parties who are resident abroad.

³ Only the applicant shall have party status in the procedure governing clearances from the supervisory authorities.

Section 5: Amendment, Transfer, Withdrawal and Expiry of Rulings

Article 65 Amendment

¹ After completion of the procedure for the granting of a general licence, an amendment is required:

- a. for a change of purpose or scope of activities of a nuclear facility that requires a general licence (this does not include decommissioning or closure);
- b. for a comprehensive upgrading of a nuclear power plant in order to extend its service life, especially if the reactor vessel is to be replaced.

² After the respective issuing procedure has been completed, an amendment to a licence or order is required in the event of any significant deviations from the original construction licence, operating licence, licence for carrying out geological investigations, and orders regarding decommissioning and closure.

³ In the event of amendments that do not deviate significantly from the respective licence or order as cited in paragraph 2, but which may have an influence on nuclear safety or security, the holder is required to obtain a clearance from the supervisory authorities.

⁴ All other amendments must be reported to the supervisory authorities.

⁵ In case of doubt:

- a. the Federal Council shall decide whether an amendment to a general licence is necessary;
- b. the Department shall decide whether an amendment to a licence or order is required as cited in paragraph 2;
- c. The supervisory authorities shall decide whether a clearance is required.

Article 66 Transfer

¹ The licensing authority may transfer a licence to a new holder if the latter meets the specified requirements.

² A general licence for a nuclear power plant may be transferred if the previous holder has also secured the financing of decommissioning and disposal in accordance with the duration of operation.

³ The Federal Council is responsible for the transfer of a general licence. Before doing so, it shall first request the authorities of the canton in which the facility is located to submit an advisory opinion.

⁴ When a general licence is thus transferred, the construction licence and operating licence shall be transferred with it. Construction licences and operating licences may not be transferred separately.

⁵ In the procedure governing the transfer of a general licence, only the applicant and the previous licence holder shall have the status of party. The provisions of the Federal Administrative Procedures Act²¹ shall apply.

⁶ Licences for handling nuclear goods and radioactive waste are non-transferable.

Article 67 Withdrawal

¹ The licensing authority shall withdraw a licence if:

- a. the prerequisites for granting it are not, or are no longer, met;
- b. the licence holder fails to comply with a ruling or ordered measure despite having been reminded to do so.

² The Federal Council shall be responsible for decisions concerning the withdrawal of a general licence.

³ The decision of the Federal Council shall be subject to approval by the Federal Assembly.

⁴ The withdrawal of the general licence also entails the withdrawal of the construction licence and of the operating licence.

⁵ The provisions of the Federal Administrative Procedures Act²² shall apply for the withdrawal of a general licence.

Article 68 Expiry

¹ The licence expires when:

- a. the period of validity cited therein has elapsed;
- b. the licence holder notifies the licensing authority that he wishes to renounce the licence;

²¹ SR 172.021

²² SR 172.021

- c. the Department or the Federal Council declare (in accordance with Article 39, paragraph 4) that the site is no longer subject to the provisions of nuclear energy legislation.

² A general licence shall expire if an application for a construction licence is not submitted within the stated period. A construction licence shall expire if construction work is not commenced within the stated period.

³ When a general licence expires, the construction licence and operating licence shall expire with it.

Article 69 Applicability of licence provisions

¹ The provisions included in an operating licence that are required to maintain the security of a nuclear facility after it has ceased operation shall remain in effect after withdrawal or expiry of the licence, until such time as arrangements have been completed regarding decommissioning and sealing.

² Paragraph 1 shall apply analogously to the withdrawal and expiry of a licence in accordance with Article 20, paragraph 3.

Section 6: Supervision

Article 70 Supervisory authorities

¹ The Federal Council shall designate the supervisory authorities.

² These shall not be technically bound to directives, and shall be formally separated from the licensing authorities.

Article 71 Commission for the safety of nuclear facilities

¹ The Federal Council shall appoint a commission for the safety of nuclear facilities.

² This commission shall function as an advisory body to the Federal Council and the Department. Its main duties shall be to examine fundamental issues concerning nuclear safety, to monitor the operation of nuclear facilities and provide advisory opinions on applications submitted for licences relating to nuclear facilities.

Article 72 Duties and powers of supervisory authorities

¹ The supervisory authorities shall examine submitted projects and ensure that licence holders and owners of nuclear goods meet their obligations in accordance with the provisions of this Act.

² They shall order all necessary and reasonable measures aimed at preserving nuclear safety and security.

³ In the event of an immediate threat, they may impose immediate measures that deviate from the issued licence or ruling.

⁴ If necessary they may seize nuclear goods or radioactive waste and eliminate sources of threat at the cost of the owner.

⁵ They may call on the intervention of cantonal and communal police forces, as well as the investigation bodies of the customs administration. In the event that offences against the provisions of this Act may have been committed, the supervisory authorities may call on the intervention of the relevant federal police authority. Border controls are the responsibility of the customs authorities.

⁶ The supervisory authorities shall keep detailed records of nuclear materials and radioactive waste in Swiss nuclear facilities. These records shall also encompass nuclear materials and radioactive waste abroad, insofar as they are in the possession of Swiss licence holders. They shall provide information about their location, intended use, processing and storage.

Article 73 Obligation to provide information, submit documentation, grant access

¹ Insofar as is required for the enforcement of this Act, its implementation provisions or rulings based thereon, the supervisory authorities shall be provided with all information and documentation they may need in order to make comprehensive assessments or carry out effective controls.

² The supervisory authorities are empowered to enter all plots of land, buildings and installations of persons obliged to provide information and any sites on which geological investigations are being carried out in accordance with Article 35, without prior notification, and may install monitoring devices and seals, collect material and soil samples, and inspect all relevant documentation. They may confiscate any incriminating material.

Article 74 Provision of information to the general public

¹ The relevant authorities shall regularly inform the general public about the condition of nuclear facilities and any matters pertaining to nuclear goods and radioactive waste.

² They shall inform the general public of any special occurrences.

³ Manufacturing and business secrecy shall be duly observed.

Article 75 Data protection

¹ Licensing and supervisory authorities may process personal data within the scope of the declared purpose of this Act.

² With regard to highly sensitive personal data, processing shall be restricted to administrative proceedings or criminal prosecution and sanctions.

Other highly sensitive personal data may be processed if this is deemed essential for dealing with a specific case.

³ Data may be stored electronically.

Section 7: Legal Protection

Article 76

Appeals against rulings of the Department, the licensing and supervisory authorities designated by the Federal Council, and of the administrative commissions cited under Article 81, paragraph 2, may be lodged with the Department's Appeals Commission.

Chapter 7: Securing of Financing for Decommissioning and Disposal

Article 77 Decommissioning Fund and Disposal Fund

¹ The purpose of the Decommissioning Fund is to secure the necessary financial resources for the decommissioning and dismantling of nuclear facilities and for the disposal of the resulting waste material (decommissioning costs).

² The purpose of the Disposal Fund is to secure the financing of the disposal of radioactive waste and spent fuel elements after a facility has been decommissioned (disposal costs).

³ Owners of nuclear facilities are obliged to pay contributions into the Decommissioning Fund and the Disposal Fund. The Federal Council may exempt owners of facilities with low decommissioning and disposal costs from the obligation to pay contributions into these funds.

Article 78 Entitlements

¹ The entitlements of each owner obliged to pay contributions into these funds shall be equivalent to the amount paid in, including capital earnings and after deduction of costs. Entitlements may not be sold, pledged, seized or incorporated into bankruptcy estate.

² In the event that the entitlements on the part of a contributing owner should exceed the amount paid in by same, the surplus shall be refunded within one year after calculation of the closing statement.

³ If a nuclear facility is adopted from a bankruptcy estate, the entitlements due from the two funds shall be transferred to the new owner, who shall then be obliged to pay the contributions owed to the fund by the bankrupt company.

⁴ If a company is removed from the commercial register after completion of bankruptcy proceedings and with the consent of the Department, and if the facility is not taken over by another company, the contributions already paid in shall become the property of the two funds, who shall use the amounts concerned to finance the decommissioning and disposal operations of the facility concerned. The Federal Council shall decide how any resulting surplus is to be used.

Article 79 Services performed by the funds

¹ In the event that the entitlement on the part of a contributing party should not suffice to cover the costs, the party concerned shall cover the remaining costs from its own financial resources.

² In the event that the party concerned provides evidence that its own financial resources are insufficient, the Decommissioning Fund or Disposal Fund shall cover the remaining costs from its overall resources. This shall also apply in the case cited in Article 78, paragraph 4.

³ The Disposal Fund shall cover costs incurred by the Confederation in association with disposal requirements in accordance with Article 33, paragraph 1b, from the contributions that the contributing party has paid into the fund. In the event that these contributions should not suffice, the fund shall cover the remaining costs from its overall resources.

Article 80 Obligation to pay additional contributions

¹ In the event that the payments by a fund in favour of a beneficiary should exceed the entitlements, the beneficiary shall repay the difference to the fund, together with interest at normal market rates.

² If the beneficiary is unable to effect repayment within a period specified by the Federal Council, the other contributing parties and beneficiaries of the fund concerned shall cover the difference through additional payments in proportion to their contributions.

³ An obligation to pay additional contributions shall also apply:

- a. in the case of Article 78, paragraph 4, if the contributions that have become the property of the fund should not suffice to cover the decommissioning or disposal costs;
- b. in the case of Article 79, paragraph 3, if the party responsible for disposal fails to repay the difference to the fund.

⁴ In the event that additional payments to cover shortages of funds should be deemed unreasonable by the parties concerned, the Federal Assembly shall decide whether, and to what extent, the Confederation shall contribute towards the uncovered costs.

Article 81 Legal form and organisational structure of the two funds

¹ The funds take the form of public law entities, and are subject to the supervision of the Confederation.

² The Federal Council appoints an administrative commission for each fund as executive body. The two commissions specify the contributions to be paid to their respective funds, and the benefits and services to be provided.

³ If necessary, the funds may grant advances to one another or the Confederation may grant advances to either fund or both funds; interest on these loans shall be based on normal market rates.

⁴ Both funds are exempt from all direct federal, cantonal and communal taxes.

⁵ The Federal Council shall regulate the activities of the two funds; it specifies the basis for calculating the contributions, and defines the principles of their investment policy. It may also amalgamate the funds.

Article 82 Securing the financing of other disposal activities

¹ In accordance with Article 669 of the Code of Obligations²³, and based on the calculations of disposal costs by the Disposal Fund, owners of nuclear facilities are required to establish reserves for disposal costs that arise prior to decommissioning.

² Furthermore, owners are required to:

- a. submit their reserves plan to the authority designated by the Federal Council for approval;
- b. describe the assets in the reserves that are earmarked for covering disposal costs;
- c. submit an auditors' report to the authority designated by the Federal Council concerning compliance with the reserves plan and the use of earmarked reserves.

³ The auditors shall inspect the long-term financial and investment plans and verify whether the financial resources are available that are required to cover disposal costs prior to decommissioning and whether the allocations of funds to reserves have been carried out in accordance with the reserves plan.

Chapter 8: Fees, Compensation, Support Measures

Article 83 Charges and supervision fees collected by the Confederation

¹ The relevant federal authorities shall collect fees from applicants for licences and from owners of nuclear facilities, nuclear goods and radioactive waste, and shall request remuneration of costs, in particular for:

- a. the granting, transfer, amendment, modification and withdrawal of licences;
- b. the preparation of expert reports;
- c. supervisory activities;
- d. Research and development activities carried out by the Confederation or on its behalf within the scope of supervisory duties for specific nuclear facilities.

² The relevant federal authorities shall, in addition, collect an annual fee from owners of nuclear facilities to cover the costs of supervisory activities that cannot be charged to specific nuclear facilities. The amount concerned shall be calculated on

²³ SR 220

the basis of the average costs over the past five years, and shall be charged to each nuclear facility in proportion to the chargeable services provided.

³ The Federal Council shall regulate this procedure.

Article 84 Cantonal fees

¹ The cantonal authorities may collect fees from owners of nuclear facilities, nuclear goods and radioactive waste, and request remuneration of costs, in particular for:

- a. the planning and implementation of emergency measures;
- b. the protection of nuclear facilities by the police and the transport of nuclear materials and radioactive waste;
- c. the training of security guards;
- d. surveys of plots of land in the protection zone, their recording in the land register and entries in the land register.

Article 85 Compensation for cantonal sovereignty

¹ In the event that cantonal sovereignty should be affected as the result of geological investigations in accordance with Article 35, deep geological repositories or protection zones, the licence holder shall compensate the canton concerned in full.

² Full compensation in accordance with paragraph 1 above shall also be paid if claims are made on cantonal water rights as the result of the construction of a nuclear power plant.

³ In case of dispute, the Compulsory Purchase Tribunal shall specify the amount of compensation to be paid in proceedings in accordance with Articles 57–75 and 77–86 of the Compulsory Purchase Act²⁴.

Article 86 Promotion of research and training of specialised personnel

¹ The Confederation may promote applied research into the peaceful use of nuclear energy, especially into the safety of nuclear facilities and into nuclear waste disposal.

² It may support the education of specialised personnel, or carry out its own training programmes.

³ As a rule, private individuals are only entitled to receive financial assistance if they bear at least 50 per cent of the costs.

Article 87 Contributions to international organisations and participation in international projects

The Confederation may contribute to international organisations and participate in international projects in the area of peaceful use of nuclear energy, in particular

²⁴ SR 711

those involving the non-proliferation of nuclear arms, safety, public health and environmental protection.

Chapter 9: Criminal Provisions

Article 88 Failure to observe safety and security measures

¹ Whoever intentionally commits any of the following offences shall be liable to a term of imprisonment or a fine of up to 500,000 Swiss francs:

- a. manufacturing or supplying faulty components of a nuclear facility that are important in terms of nuclear safety or security;
- b. damaging, removing, rendering unusable, using in an improper manner or putting out of operation an installation in a nuclear facility that is important in terms of nuclear safety or security, or failing to install or render such an installation ready for operation;
- c. failing to observe protective measures that are important in terms of nuclear safety or security when handling nuclear materials or radioactive waste.

² Whoever by committing the foregoing offences knowingly endangers the life or health of a number of human beings, or causes damage to property of significant value, shall be liable to a term of penal servitude, which may also be combined with a fine of up to 500,000 Swiss francs.

3 If the offender has acted negligently, he shall be liable to a term of imprisonment or a fine of up to 100,000 Swiss francs.

Article 89 Offences involving nuclear goods and radioactive waste

¹ Whoever intentionally commits any of the following offences shall be liable to a term of imprisonment or a fine of up to 1 million Swiss francs:

- a. handling nuclear goods or radioactive waste without holding the necessary licence, or failing to comply with the conditions or requirements stipulated in a licence;
- b. when applying for a licence, providing essential information that is incomplete or false, or using an application that has been completed by a third party;
- c. falsely declaring nuclear goods or radioactive waste, or failing to notify the relevant authorities when importing, exporting or conveying such matter in transit;
- d. actively or passively supplying, transferring or mediating nuclear goods or radioactive waste to another end-user or destination than the one named in the licence;
- e. supplying a person with nuclear goods or radioactive waste even though it is known or has to be assumed that the person concerned will directly or indirectly pass them on unlawfully to an end-user;

- f. participating in the financing of an illegal transaction with nuclear goods or radioactive waste, or mediating the financing of such a transaction.

² In serious cases, the penalty shall be penal servitude of up to ten years. This penalty may also be combined with a fine of up to 5 million Swiss francs.

³ If the offender has acted negligently, he shall be liable to a term of imprisonment of up to six months, or a fine of up to 100,000 Swiss francs.

Article 90 Failure to fulfil the licence obligations for nuclear facilities

¹ Whoever intentionally commits any of the following offences shall be liable to a term of imprisonment or a fine of up to 500,000 Swiss francs:

- a. constructing or operating a nuclear facility without a licence;
- b. failing to fulfil the obligations arising from an operating licence for a nuclear facility (Articles 22 and 38), decommissioning obligations (Article 26) or the obligations associated with the disposal of radioactive waste and the sealing of a deep geological repository (Article 31 and Article 39, paragraphs 1 and 2);
- c. carrying out operations that affect the protection zone of a deep geological repository, without holding the necessary licence;
- d. carrying out an activity that requires a clearance, without first obtaining the necessary clearance.

² If the offender has acted negligently, he shall be liable to a term of imprisonment of up to six months, or a fine of up to 100,000 Swiss francs.

³ Whoever intentionally or negligently carries out other activities that are subject to the granting of a licence in accordance with the provisions of this Act or an associated ordinance, but who does not hold the requisite licence, shall be liable to a term of imprisonment of up to six months or a fine of up to 100,000 Swiss francs.

Article 91 Breach of secrecy

¹ Whoever intentionally commits any of the following offences shall be liable to a term of imprisonment or a fine of up to 500,000 Swiss francs:

- a. obtaining details of secret facts or precautionary measures aimed at protecting nuclear facilities, nuclear materials or radioactive waste against intervention by third parties or the effects of armed conflicts, in order to disclose them, or make them accessible, to unauthorised parties, or to use the information thus obtained themselves in an unauthorised manner;
- b. disclosing such facts or measures, or making them accessible to unauthorised parties.

² If the offender has acted negligently, he shall be liable to a term of imprisonment of up to six months or a fine of up to 100,000 Swiss francs.

Article 92 Surrendering ownership

¹ Whoever intentionally surrenders ownership of nuclear materials or radioactive waste without the necessary authority to do so shall be liable to a term of imprisonment or a fine of up to 100,000 Swiss francs.

² If the offender has acted negligently, he shall be liable to a term of imprisonment of up to six months or a fine.

Article 93 Contraventions

¹ Whoever intentionally commits any of the following contraventions shall be liable to a term of imprisonment or a fine of up to 100,000 Swiss francs:

- a. refusing to provide information, submit documentation or permit access to business premises or inspection of documentation in accordance with Article 73, or giving false information in this connection;
- b. failing to comply with a reporting obligation, an auditing and accounting obligation or an obligation to keep records in accordance with this Act, or infringing against an associated ordinance;
- c. infringing in any other way against the provisions of this Act or an associated ordinance, if the misdemeanour concerned is declared punishable by law, or against a ruling if infringement thereof is declared punishable by law, and no unlawful behaviour is involved in accordance with another criminal offence.

² Attempts and aiding and abetting shall be punishable by law.

³ If the offender has acted negligently, he shall be liable to a fine of up to 40,000 Swiss francs.

Article 94 Offences in commercial enterprises

For offences in accordance with this Act, Article 6 of the Federal Act of 22 March 1974²⁵ on Administrative Criminal Law applies.

Article 95 Offences committed abroad, involvement in offences committed abroad

¹ A Swiss citizen who commits a felony or misdemeanour in accordance with Articles 89 and 91 abroad shall be punishable by law even if the act is not subject to prosecution in the country concerned.

² If a participant in an offence committed abroad has acted within Switzerland, the provisions of the Swiss Criminal Code apply provided the main act is punishable by law in Switzerland, irrespective of the law in the country in which the main act was committed.

Article 96 Statute of limitations for misdemeanours

The term of limitation for misdemeanours is five years. This period may not be extended by more than half as the result of interruptions.

Article 97 Seizure of objects

A judge may order the seizure of objects, without consideration as to the liability of a given person to prosecution, if no guarantee is provided that the objects will be used for lawful purposes. Objects thus seized, and any proceeds from utilisation or disposal thereof, shall become the property of the Confederation.

Article 98 Seizure of assets or substitute claims

Any seized assets or substitute claims shall become the property of the Confederation.

Article 99 Relationship to the Criminal Code

Seizure of goods and assets under Articles 97 and 98 above shall also be subject to the provisions of Articles 58 and 59 of the Swiss Criminal Code²⁶.

Article 100 Jurisdiction, obligation to report to the Office of the Attorney General

¹ The prosecution and judgement of felonies and misdemeanours in accordance with Articles 88 to 92 above shall be subject to the jurisdiction of the Federal Criminal Court.

² Contraventions in accordance with Article 93 shall be prosecuted and judged by the SFOE. These proceedings shall be subject to the provisions of the Federal Act of 22 March 1974²⁷ on Administrative Criminal Law.

³ Licensing and supervisory authorities, cantonal and communal police and customs authorities are obliged to notify the Office of the Attorney General about any offences committed against this Act that may come to their attention in the course of their services and activities or in any other way.

Chapter 10: Final Provisions**Article 101** Enforcement

¹ The Federal Council shall specify the provisions governing the enforcement of this Act.

² It may assign the specification of regulations to the Department or subordinate authorities, taking due account of the importance thereof.

²⁶ SR 311.0

²⁷ SR 313.0

³ The authority designated by the Federal Council shall maintain a centralised service that procures, processes and passes on data insofar as this is necessary for the enforcement of this Act, the prevention of illegal activities and the prosecution of offenders.

⁴ The licensing and supervisory authorities shall maintain official secrecy and take all precautionary measures to prevent economic espionage.

⁵ The Federal Council may call on the cantonal authorities to assist with the enforcement of this Act.

⁶ Within the scope of its own competencies, the enforcement authority may call on third parties to assist with the enforcement of this Act, in particular for carrying out examinations and inspections.

Article 102 Administrative assistance in Switzerland

The relevant federal authorities and cantonal and communal police may exchange data among themselves and with the supervisory authorities, insofar as this is necessary for the enforcement of this Act.

Article 103 International administrative assistance

¹ The federal authorities responsible for enforcement, control, prevention of illegal acts or prosecution of offenders may work together with the relevant authorities of other countries and international organisations and committees and co-ordinate the procurement of data, insofar as this is necessary for the enforcement of this Act or of equivalent foreign legislation, and the foreign authorities or international organisations or committees are obliged to observe official secrecy or are bound to an equivalent secrecy obligation.

² They may specifically request foreign authorities and international organisations or committees to supply the necessary data. For this purpose, they may provide data concerning:

- a. the nature, quantity, destination and intended place of utilisation, intended purpose and recipient of nuclear goods and radioactive waste;
- b. people who are involved in the manufacture, supply, mediation or financing of nuclear goods and radioactive waste;
- c. financing of associated transactions;
- d. accidents and occurrences of relevance to safety.

³ If the foreign country concerned has signed a reciprocal rights agreement with Switzerland, the relevant federal authorities may supply it with data in accordance with paragraph 2 at their own discretion or upon request, as long as the foreign authority or authorities guarantee that the data:

- a. will only be used for purposes in keeping with the provisions of this Act, and;

- b. will only be used in criminal proceedings if they have subsequently been procured in accordance with the provisions of international legal assistance.

⁴ They may also provide international organisations or committees with data under the same conditions as those cited in paragraph 3 above, though here the requirement of reciprocal rights may be waived.

⁵ The above clauses shall remain subject to the provisions governing mutual international assistance in criminal matters.

Article 104 International agreements

¹ The Federal Council may conclude bilateral international agreements concerning:

- a. the handling of nuclear goods and radioactive waste;
- b. security and control measures for nuclear goods and radioactive waste;
- c. exchange of information regarding the construction and operation of nuclear facilities.

² Within the scope of approved credits, it may conclude agreements concerning participation in international projects in accordance with Article 87.

Article 105 Repeal and amendment of previously existing legislation

The repeal and amendment of previously existing legislation is dealt with in the Appendix.

Article 106 Transitional provisions

¹ Nuclear facilities that require a general licence in accordance with the provisions of this Act, and which are already in operation, may continue to be operated without the corresponding licence as long as no changes are made that require an amendment of the general licence in accordance with Article 65, paragraph 1.

² Owners of existing nuclear power plants are required to demonstrate within a period of ten years that arrangements for the management of radioactive waste arising from these plants is assured, if the Federal Council does not already deem this assurance to have been provided. The Federal Council may extend this deadline by five years in justified circumstances.

³ An operating licence for an existing nuclear power plant may be transferred to a new owner without a general licence. Article 13, paragraph 2, Article 31, paragraph 3 and Article 66, paragraph 2 shall apply analogously.

⁴ Spent fuel elements may not be exported for reprocessing for a period of ten years with effect from 1 July 2006. During this period they shall be managed as radioactive waste. The Federal Council may permit exceptions for research purposes – here, Article 34, paragraphs 2 and 3 shall apply analogously. The Federal Assembly may extend this period of ten years by a maximum of ten years through simple federal resolution.

Article 107 Referendum and entry into force

¹ This Act is subject to an optional referendum.

² The Federal Council shall publish this Act in the Swiss Federal Gazette if the two popular initiatives, “Moratorium Plus” and “Electricity Without Atomic Energy” are withdrawn or have been rejected.

³ The Federal Council shall determine the date on which this Act enters into force .

Council of States, 21 March 2003

National Council, 21 March 2003

President: Gian-Reto Plattner
Secretary: Christoph Lanz

President: Yves Christen
Secretary: Christophe Thomann

Entry into force: 1 February 2005

Appendix
(Article 105)**Repeal and amendment of previously existing legislation****I**

The following shall be repealed:

1. Atomic Energy Act of 23 December 1959²⁸
2. Federal Resolution of 6 October 1978 concerning the Atomic Energy Act²⁹

II

The following Acts shall be amended as indicated:

1. Federal Administration of Justice Act of 16 December 1943³⁰*Article 99, paragraph 1e*

¹ Administrative Court appeals against the following shall not be permissible

- e. Granting or refusal of construction licences and operating licences for vehicles or technical installations, other than for installations for civil aviation purposes and for nuclear facilities;

Article 100, paragraph 1u

¹ Administrative Court appeals against the following shall not be permissible

- u. Within the area of nuclear energy:
 1. Rulings on general licences for nuclear facilities,
 2. Rulings on the sealing of deep geological repositories,
 3. Rulings on the licensing obligation or on the amendment of a licence ruling,

²⁸ AS 1960 541, 1983 1886, 1987 544, 1993 901, 1994 1933, 1995 4954

²⁹ AS 1979 816, 1983 794, 1990 1646, 2001 283

³⁰ SR 173.110

4. Rulings on the approval of a plan for establishing reserves to cover the costs of waste disposal that arise prior to the decommissioning of a nuclear facility,
5. Approvals.

2. Swiss Criminal Code³¹

*Article 226b*³²

Imperilment
through nuclear
energy, radioac-
tivity and
ionising radia-
tion

¹ Whoever intentionally endangers the life or health of human beings, or causes damage to property of significant value, through nuclear energy, radioactive substances or ionising radiation shall be liable to a term of imprisonment and a fine of up to 500,000 Swiss francs.

² If the offender has acted negligently, he shall be liable to a term of imprisonment of up to five years, or a fine of up to 100,000 Swiss francs.

³¹ SR 311.0

³² When the amendment to the Criminal Code of 13 December 2002 comes into effect (BBL 2002 8240), the text of Article 226b shall read as follows:

Article 226b

Imperilment
through
nuclear energy,
radioactivity
and ionising
radiation

¹ Whoever intentionally endangers the life or health of human beings, or causes damage to property of significant value, through nuclear energy, radioactive substances or ionising radiation shall be liable to a term of imprisonment or a fine. Any term of imprisonment shall be combined with a fine.

² If the offender has acted negligently, he shall be liable to a term of imprisonment of up to five years, or a fine of up to 100,000 Swiss francs.

*Article 226 ter*³³

Preparatory acts
punishable by
law

¹ Whoever makes specific technical or organisational preparations for actions intended to endanger the life or health of human beings, or cause damage to property of significant value, through nuclear energy, radioactive substances or ionising radiation shall be liable to a term of imprisonment of up to five years and a fine of up to 100,000 Swiss francs.

² Whoever manufactures, procures, passes on to others, accepts from others, stores, conceals or forwards, radioactive substances, installations, devices or objects that contain radioactive substances or may emit ionising radiation shall be liable to a term of imprisonment of up to ten years or a fine of up to 100,000 Swiss francs, if he is aware or has to assume that these are intended to be used for illegal purposes.

³ Whoever instructs another to manufacture such substances, installations, devices or objects shall be liable to a term of imprisonment of up to five years or a fine of up to 100,000 Swiss francs, if he is aware or has to assume that these are intended to be used for illegal purposes.

- ³³ When the amendment to the Criminal Code of 13 December 2002 enters into force (BBL 2002, 8240), the text of Article 226 ter shall read as follows:

Article 226ter

Preparatory
acts punishable
by law

1 Whoever makes specific technical or organisational preparations for actions intended to endanger the life or health of human beings, or cause damage to property of significant value, through nuclear energy, radioactive substances or ionising radiation shall be liable to a term of imprisonment of up to five years or a fine. Any term of imprisonment shall be combined with a fine.

2 Whoever manufactures, procures, passes on to others, accepts from others, stores, conceals or forwards radioactive substances, installations, devices or objects that contain radioactive substances or may emit ionising radiation shall be liable to a term of imprisonment of up to ten years or a fine, if he is aware or has to assume that these are intended to be used for illegal purposes. Any term of imprisonment shall be combined with a fine.

3 Whoever instructs another to manufacture such substances, installations, devices or objects, shall be liable to a term of imprisonment of up to five years or a fine, if he is aware or has to assume that these are intended to be used for illegal purposes. Any term of imprisonment shall be combined with a fine.

Article 340, paragraph 1, lemma 4³⁴

1. The following shall be subject to federal jurisdiction:
crimes and offences in accordance with Articles 224-226 ter.

3. Federal Nuclear Energy Liability Act of 18 March 1983³⁵

Article 16, paragraph 1c-e

¹ Insofar as the injured party has not intentionally caused the damage, the Confederation shall pay compensation from its general funds up to the amount cited in Article 12, except for nuclear damages:

- c. If the damage is attributable to a deep geological repository that is no longer subject to the provisions of nuclear energy legislation;
- d. *Previously c*
- e. *Previously d*

4. Federal Radiation Protection Act of 22 March 1991³⁶

Article 2, paragraphs 2 and 3

² The term “handling” refers to extracting, manufacturing, processing, distributing, installing, using, storing, transporting, disposal, importing, exporting, transit and all other forms of forwarding.

³ Articles 28-38 shall not be applicable to activities for which a licence is required in accordance with the Nuclear Energy Act of 21 March 2003³⁷.

Article 3a

In addition to the provisions of this Act, the following shall be applicable:

- a. For nuclear facilities, nuclear goods and radioactive waste, the Nuclear Energy Act of 21 March 2003³⁸;

³⁴ When the amendment to the Criminal Code of 13 December 2002 enters into force (BBL 2002, 8240), the text of Article 336, paragraph 1d shall read as follows:

Article 336, paragraph 1d

1 The following shall be subject to federal jurisdiction:

d. crimes and offences in accordance with Articles 224-226 ter.

³⁵ SR 732.44

³⁶ SR 814.50

³⁷ SR 732.1; AS 2004 4719

³⁸ SR 732.1; AS 2004 4719

Article 25, paragraphs 3 and 4

³ All radioactive waste produced in Switzerland shall, as a general rule, be managed in Switzerland. For exporting radioactive waste for management purposes, a licence may be granted by way of exception in the following circumstances:

- a. if the country of destination has consented to the import of radioactive waste for management purposes in an agreement under international law;
- b. if the country of destination has a suitable nuclear facility that fulfils the latest international standards of science and technology;
- c. if all countries concerned have given their consent to the transit of the radioactive waste in question;
- d. if the importer and the exporter of the radioactive waste consignment have signed a legally binding agreement that has been approved by the authority designated by the Federal Council and stipulates that the exporter shall accept the consignment if it has to be returned for any reason.

⁴ A permit for the import of radioactive waste that has not been produced in Switzerland, but is to be managed here, may be granted by way of exception in the following circumstances:

- a. if Switzerland has consented to the import of radioactive waste for management purposes in an agreement under international law;
- b. if Switzerland has a suitable nuclear facility that fulfils the latest international standards of science and technology;
- c. if all countries concerned have given their consent to the transit of the radioactive waste in question;
- d. if the importer and the exporter of the radioactive waste consignment have signed a legally binding agreement that has been approved by the country of origin and stipulates that the exporter shall accept the consignment if it has to be returned for any reason.

Article 26, paragraph 3

³ Radioactive waste that may not be discharged to the environment must be contained in a suitable manner or securely sealed, solidified if necessary, collected and subsequently stored at a place approved by the supervisory authorities until such time as it is delivered or exported.

*Article 27, header and paragraphs 2 to 4**Delivery*

² He shall be responsible for paying the management costs.

³ The Federal Council shall regulate the on-site handling of radioactive waste and its delivery for management.

⁴ If immediate delivery or management is not possible or feasible for reasons relating to protection against radiation, the waste material shall be placed in interim storage under supervision.

Article 30 Licensing authorities

The Federal Council shall designate the licensing authorities.

Article 43 Unlawful exposure of human beings to radiation

¹ Whoever intentionally and unlawfully exposes another person to radiation shall be liable to a term of imprisonment or a fine of up to 100,000 Swiss francs.

² Whoever intentionally and unlawfully exposes another person to radiation with the aim of damaging his health shall be liable to a term of imprisonment.

³ Whoever negligently and unlawfully exposes another person to radiation shall be liable to a term of imprisonment or a fine.

Article 43a Illegal handling of radioactive substances, unlawful exposure of objects to radiation

¹ Whoever intentionally commits one of the following offences shall be liable to a term of imprisonment or a fine of up to 100,000 Swiss francs:

- a. illegally storing and disposing of radioactive substances, or releasing them into the environment;
- b. unlawfully exposing objects of substantial value to radiation with the aim of interfering with their usability.

² If the offender has acted negligently, he shall be liable to a term of imprisonment of up to six months or a fine.

Article 44, paragraph 1a

¹ Whoever intentionally or negligently commits one of the following offences shall be liable to a term of imprisonment or a fine:

- a. carrying out activities without holding the necessary licence, obtaining a licence in an unlawful manner, or failing to comply with the conditions or requirements stipulated in a licence;

Article 46, paragraph 1

¹ Crimes and offences in accordance with Articles 43 and 43a shall be subject to federal criminal jurisdiction.

Article 47, paragraphs 2 and 3

² It may assign the specification of regulations governing radiation protection for activities for which a licence is required in accordance with the Nuclear Energy Act

of 21 March 2003³⁹ to the relevant department or a subordinate office. In so doing, it shall take due account of the significance of the regulations.

³ *previously paragraph 2*

5. Value Added Tax Act of 2 September 1991⁴⁰

Article 29 b Termination of tax obligation for nuclear facilities

After a nuclear facility has ceased operation, the owner shall remain liable to pay VAT until such time as decommissioning and disposal activities have been concluded, and shall remain entitled to make pre-tax deductions throughout the entire decommissioning and disposal period. This shall apply to all costs associated with decommissioning, demolition and disposal.

6. Energy Act of 26 June 1998⁴¹

Article 5 b Labelling of electricity

In order to protect end-users, the Federal Council may issue regulations governing the designation of electricity, in particular concerning its origin and the method by which it has been generated. It may also introduce a labelling obligation.

Article 7, paragraph 7

⁷ The additional costs incurred by electricity distribution companies for adopting electricity from independent producers shall be financed by the operators of the transmission network in the form of a surcharge on transmission costs of high-voltage networks.

Article 28, paragraph 1a

¹ Whoever intentionally commits one of the following misdemeanours shall be liable to a term of imprisonment or a fine of up to 40,000 Swiss francs:

- a. Contraventions against regulations governing electricity labelling (Article 5);

³⁹ SR 732.1; AS 2004 4719

⁴⁰ SR 641.20

⁴¹ SR 730.0